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ABSTRACT

This study examined the effectiveness of Minnesota Mainstream, a program serving professional individuals with psychiatric disabilities. The study also examined common career patterns among professional persons with psychiatric disabilities. Program participants (N=187), staff, and mentors were interviewed. Data were analyzed in terms of participant demographic characteristics, program satisfaction, higher educational history, employment history, employment outcomes, career patterns, independent living and housing, satisfaction with life, relative importance of employment, age of onset, and type of psychiatric disability. Conclusions include: (1) because Minnesota Mainstream has demonstrated success, it should be carefully replicated by other community-based rehabilitation programs; (2) while the use of mentors shows promise, the results of this study are not conclusive; and (3) career development for persons with psychiatric disabilities is complex and variable, although five specific career patterns were identified. One recommendation is that the relative importance of vocational goals to other goals be considered during individual planning and service provision. Individual chapters review the related literature, describe the study's methodology, report results, and discuss conclusions. Three appendices contain sample data collection instruments, informed consent forms, and identification forms. (Contains 53 references.) (DB)

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Outcomes and Career Achievements of Persons With Professional Qualifications Who Have Severe Psychiatric Disabilities: The Minnesota Mainstream Experience

Karl F. Botterbusch, Ph.D., CVE

1999

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of Persons With Professional Qualifications
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The Minnesota Mainstream Experience

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*Dedicated to Nancy Stearns, job placement specialist for seven years with
Minnesota Mainstream prior to her retirement in June of 1998.*

Acknowledgments:

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Executive Summary

Although vocational programs for persons with psychiatric disabilities have been provided for over 50 years and the outcomes of these programs have been systematically investigated since the 1960s (see Literature Review), there have been no vocational programs designed to serve persons with psychiatric disabilities who have higher educations and professional careers. Until recently this population was not served in a systematic way. The Minnesota Mainstream program was the first program designed to serve persons with psychiatric disabilities having professional careers (see Results for a description). This consumer-staffed program offers a wide variety of services including individual and group counseling, job seeking skills, occupational information, placement, mentoring, and follow-up.

The career development literature places little emphasis on disability and its relationship to careers. The consumers involved in Minnesota Mainstream have completed at least a bachelor's degree and most had professional employment, presenting an excellent opportunity to study career development within a tightly defined group.

Research Problems and Questions

This study centered on the issues of evaluating the effectiveness of the Minnesota Mainstream program and describing career development patterns for persons with psychiatric disabilities who have higher education.

To determine the effectiveness of Minnesota Mainstream in achieving vocational outcomes for its participants:

1. *What is the Minnesota Mainstream program?*
2. *What are the demographic characteristics of the consumers in the Minnesota Mainstream program?*
3. *What are the vocational outcomes of the Minnesota Mainstream program?*
4. *What are the consumers' present levels of functioning?*

To determine the career patterns among professional persons with psychiatric disabilities.

1. *What were the higher education and employment histories of consumers in the Minnesota Mainstream program?*
2. *Are objective career development patterns identifiable?*
3. *What are the consumers' attitudes and values about employment and having a career?*

Methodology

A Constituency Advisory Committee (CAC) was established to guide all aspects of the study. Based upon the research questions, literature, CAC suggestions, and staff experiences, data collection instruments were developed for the three groups of persons involved in the study. Consumers completed detailed questionnaires of their educational and employment history prior to a semi-structured interview that commonly lasted for one hour. Mainstream staff were interviewed about program history and procedures. Professional persons in the community advising specific consumers were interviewed about the mentoring process.

Between December, 1989, and March, 1996, Mainstream provided significant services to 187 persons; 48 were involved in the study. The consumers were interviewed by the principal investigator and a trained interviewer. The principal investigator interviewed all staff and mentors. Following data collection, all data were entered into a database and analyzed using SPSSx.

Summary of Results

1. **Participants.** Participants in the study were 60 percent male, almost entirely white, and were in their mid-forties when they entered the Mainstream program. Most consumers came from homes in which the father was employed as a skilled, semi-professional, or professional worker, and the mother was a homemaker. The mean GAF (Global Assessment of Functioning) for the sample was 50.39, at the low-end of the Moderate Range. The two most common primary disabilities were mood or affective disorders (65.6%) and schizophrenia and related (25.0%). The most common secondary disability was another psychiatric disability (e.g., anxiety disorder). The 48 persons in the sample were representative of the 187 persons who received services through the program.
2. **Program satisfaction.** Consumers were generally satisfied with the Minnesota Mainstream program. The program provided a variety of individually based services, the most common and best liked of which were individual and group counseling. Although consumers were moderately satisfied with the services they received, consumers reported problems with the mentoring program (e.g., shortage of mentors).
3. **Higher educational history prior to Mainstream.** The typical consumer attended three colleges. All had completed at least an undergraduate degree, with the median education about two years beyond the bachelor's degree. As the amount of education increased, persons shifted from liberal arts to technical degrees.
4. **Employment history prior to Mainstream.** Employment history prior to entering Mainstream revealed a gradual reduction in the number of years on the job, hourly wage, weeks worked, estimated weekly income, job satisfaction, and skill level required in the job in which they were employed. In general, a change in the type of employer was related to a reduction in job skill level.

5. **Employment outcomes.** Seventy-seven percent of the consumers were employed after the program; 23 percent were unemployed. Employed persons could be divided into two groups: (a) those with the same job before and after services (27%) and (b) those with new jobs after services (50%). Consumers employed in new jobs returned to their pre-service levels of income, while job-skill level and job satisfaction increased. Most of the 77 percent who were employed worked in skilled, semi-professional, and professional jobs. Income, skill level, and job satisfaction remained constant during the four years following employment. The GAF was the only variable significantly related to employment outcome. Most (82.6%) of the consumers neither asked for nor received any accommodations during employment, and slightly over half of the consumers received support following Mainstream services.
6. **Career patterns.** Based on a preliminary analysis of the data, five career development patterns were hypothesized. A computer program, developed to test for the existence of these five patterns, demonstrated the existence of the following patterns:
 - Career Constant With Post-Formal Educational Disability Onset (Pattern A).*
2 consumers.
 - Career Constant With Pre-Formal Education Completion Disability Onset (Pattern B).*
8 consumers.
 - Career Change With Post-Formal Education Disability Onset (Pattern C).*
11 consumers.
 - Career Change With Pre-Formal Education Completion Disability Onset (Pattern D).*
19 consumers.
 - No Career With Varying Onset (Pattern E).*
7 consumers.
7. **Independent living and housing.** At the time of the interview, most consumers lived independently alone or with family. Most considered housing to be an affordable expense. The three major sources of support were full-time job, part-time job, and SSDI. Consumers had limited community integration.
8. **Satisfaction with life.** There was no significant difference between consumer satisfaction with life at present and prior to the onset of mental illness. Most consumers considered themselves to be "behind" their peers in career advancement and development. The sample believed that they were managing and coping with mental health issues successfully.
9. **Relative importance of employment.** When rank-ordering values, consumers considered family life and religious/spiritual life to be more important than employment. Employment, self-support, and independent living were close in value. Consumers gave a significantly higher mean rating to "general importance of employment in life" than that given to "satisfaction with career development." Consumers did not see employment as being equal with advancing one's career.

10. **Age of onset.** The age of disability onset was related neither to Mainstream program outcomes nor to key events in the consumers' lives.
11. **Type of psychiatric disability.** Two-thirds of the consumers had affective disorders as their primary disabilities. When persons with affective disorders were compared to persons with all other disorders, persons with affective disorders perceived themselves as less able to manage their mental health and less able to cope with their mental health symptoms. No significant relationships were found between type of psychiatric disability and Mainstream outcome and age of onset.

Conclusions

The following conclusions are offered:

1. Because the demographic, educational, and employment variables indicate that the consumers were a homogenous group, the results can only safely be generalized to persons with psychiatric disabilities who have higher education and have at least a skilled or higher work history. In other words, these results are relevant for middle-aged persons with higher educations from middle-class backgrounds.
2. Because the Minnesota Mainstream program has demonstrated success, it should be carefully replicated by other community-based rehabilitation organizations. Replication efforts need to center on the interpersonal aspects of the program as well as on the specific services provided. Dedicated, qualified staff with personal experience with mental illness are likely a critical element. The effectiveness of these programs needs to be determined; and such future research needs to include records of sequence, and types and amounts of each specific service provided.
3. While the use of mentors shows promise, the results of this study are not conclusive. The role of mentor may be viewed as a slightly formal type of natural support. The purpose, role, selection, and interaction among mentor, consumer, and staff need to be more fully understood.
4. Career development for persons with psychiatric disabilities is complex and does not follow the same pattern for all persons. Five different career patterns were empirically identified for the consumers in the study. Because this research was performed on a small sample, investigations of the existence and replicability of career patterns need to be conducted with larger samples drawn from a similar population. Although this study found no relationship between career patterns and program outcomes, this too needs additional investigation.
5. Consumers placed a greater emphasis on their families and religious/spiritual values than they did on employment. Also, there was a clear differentiation between employment and career advancement as values; consumers valued employment much more than career advancement.
6. Symptom self-awareness and symptom management are a part of the person's level of functioning. Most consumers had considerable insight into their own mental health, especially

symptoms and the management of their symptoms. The possible relationship between self-knowledge of symptoms and vocational outcomes needs to be further studied.

7. One problem repeatedly raised during this study was the lack of consistent prediction of outcomes from demographic, program, or disability-related variables. Based on the positive results of the present study as well as the failure to identify variables (except the GAF) that predict outcomes, future studies of program outcomes should focus on subjective consumer variables, such as the consumer's total value system and where employment fits into that system, consumer's employment patterns, self-image, and desire for achievement.

Recommendations

1. The relative importance of vocational goals to other goals needs to be examined and considered during individual planning and service provision. Vocational goals need to be considered from two perspectives: First, what are the consumer's vocational goals as compared with family and spiritual values? Which of these are the more important and how do consumers place work in their own value system? Some consumers will not see employment as their most important value. Persons in this population appear to be seeking a balance among employment, family, and spiritual values.

Second, there is a difference between employment and career advancement. Programs for this population need to understand the difference between an acceptable level of employment and high-stress career advancement. The desire to work in accordance with one's abilities and skills is not the same as upward mobility.

2. Consumers have a variety of career histories and will have a variety of career goals. While the consumer should be free to consider a variety of occupational areas as goals, the Mainstream experience has been that those consumers remaining either in the same area or a closely related area appear to have a better chance of professional employment.
3. Underlying career goals and the relative importance of these goals is the problem of stress. Excessive stress, from specific tasks, responsibilities, or personal interaction, tended to result in increased symptoms and lowered functioning. Therefore, consumers and staff need to be aware of the stress factors of specific jobs and be able to realistically judge the long term effects of this stress on the individual consumer.

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Chapter I

Introduction

Although vocational programs for persons with psychiatric disabilities have been provided for over 50 years and the outcomes of these programs have been systematically investigated since the 1960s (see Literature Review), there have been no reported vocational programs designed to serve persons with psychiatric disabilities who have higher educations and professional careers. Until recently this population was not served in a systematic way. The Minnesota Mainstream program was the first program designed to serve persons with psychiatric disabilities who have professional careers (see Results for a description). This consumer-staffed program offers a wide variety of services including individual and group counseling, job seeking skills, occupational information, placement, mentoring, and follow-up. Since December, 1989, this program has provided a variety of vocational services to persons with higher educations who also have a major psychiatric disability (e.g., mood disorder, schizophrenia). Although this unique program was operational for six years prior to our study, there was no research to determine its effectiveness. Because a demonstration of the success of this program can lead to its replication by other organizations, this study has the potential to improve vocational outcomes for persons with psychiatric disabilities. Therefore, the first goal of this research is to measure Minnesota Mainstream program outcomes.

All consumers involved in Minnesota Mainstream had completed at least a bachelor's degree and most had held professional employment. These consumers present an excellent opportunity to study career development within a tightly defined group. The career development literature places little emphasis on disability and its relationship to careers. Of those that do, most concentrate on the age of disability onset and how this affects vocational decision making, employment history, and education history. In general, it is assumed that because the onset of psychiatric disabilities, such as major depression and schizophrenia, frequently occurs during late teens and early twenties, persons having an early onset often fail to develop careers. However, not all persons with psychiatric disabilities have an early onset. Persons can be employed from 5 to 20 years after college before disability onset. The limited literature for such persons assumes that after the crisis is over, the people simply continue on with their lives, picking up their careers where they left off. There is minimal reference to career change, additional training, downward mobility, long periods of unemployment or to the effects of the mental illness on family, friends, and life style.

Problems and Research Questions

Persons with psychiatric disabilities cover the entire range of human functioning as well as the wide range of educational achievement and occupational skills. However, almost all vocational rehabilitation research dealing with psychiatric disabilities has centered on persons without either education beyond high school or professional careers. The higher functioning segment of the population has not been described nor have many specialized services been developed for this group. With this population there are two major considerations for vocational rehabilitation.

First, Minnesota Mainstream is the only known program with considerable experience with this population. Therefore, this program needs evaluation to determine its success. The first

research problem and its specific questions are as follows:

To determine the effectiveness of Minnesota Mainstream in achieving vocational outcomes for its participants:

1. *What is the Minnesota Mainstream program?*
2. *What are the demographic characteristics of the consumers in the Minnesota Mainstream program?*
3. *What are the vocational outcomes of the Minnesota Mainstream program?*
4. *What are the consumers' present levels of functioning?*

Second, there is a need to provide a detailed description of this population as a frame of reference for consumers and staff who work with these persons. This study will describe and attempt to explain career development among persons with psychiatric disabilities who have completed at least a BA/BS degree. The second research problem and specific related questions are as follows:

To determine the career patterns among professional persons with psychiatric disabilities.

1. *What were the higher education and employment histories of consumers in the Minnesota Mainstream program?*
2. *Are objective career development patterns identifiable?*
3. *What are the consumers' attitudes and values about employment and having a career?*

Chapter II

Literature Review

This literature review is presented in two sections corresponding to the themes of employment outcomes and career development discussed in the Introduction. The first section reports a sampling of relevant outcome studies. These attempt to determine the relationship of demographic, disability, and program variables to consumer outcomes in vocational programs for persons with psychiatric disability. Key variables identified in these studies were used in the development of data collection instruments. By exploring career development theories for concepts that can be applied to the present investigation of careers, the second section builds a case for this study's emphasis on career development and how it relates to persons with psychiatric disabilities. Concepts from these studies were developed into methods of data analyses for consumer employment and educational histories.

Outcome Studies and Predictors of Outcome for Persons With Psychiatric Disabilities

Part I focuses on different types of variables and their potential value, association, or predictability with successful vocational outcomes. Psychological, vocational, and individual features related to persons with psychiatric disabilities are identified within the current research and discussed in terms of their findings, limitations, and implications for persons with psychiatric disabilities.

Demographic Characteristics

A number of studies investigating employment outcomes addressed age, marital status, education, gender, and race. One such study by Rogers, Anthony, Toole, and Brown (1991) initially pointed out several earlier studies that negated the predictive value of various demographic variables for vocational outcomes. However, to arrive at their own conclusion, the authors included a variety of demographic and clinical indicators in their longitudinal study in order to investigate the potential predictability of such variables on employment outcomes in addition to addressing features of three psychosocial rehabilitation programs. Employment outcomes were examined by comparing employed subjects to unemployed subjects at various follow-up periods. Of the 275 subjects studied over a 3.5-year period, demographic data collected included gender, age, marital status, race, and education.

No significant differences were found between the employed group and the unemployed group on any demographic variable except for marital status. From these findings, Rogers et al. (1991) surmised that married individuals were significantly more likely to be employed. However, upon examination of a restricted sample of subjects who had been in the program for one year or more, marital status did not differentiate the employed subjects from the unemployed group.

In response to the lack of findings regarding demographic determinants, Rogers et al. (1991) suggested that earlier views regarding demographics (in addition to diagnosis, work history, or hospitalization history) in differentiating an individual's potential for employment are not supported.

Other than this simple statement, the authors clearly emphasized the importance of receiving psychosocial rehabilitation services and establishing vocational goals for individuals with psychiatric disabilities in order to increase the likelihood of employment.

Additional research by Cook and Rosenberg (1994) evaluated the impact of vocational support and programming in relation to the importance of personal history and client demographics in predicting successful employment outcomes for persons with psychiatric disabilities. The study built on previous research efforts and identified four factors of predictive value for successful employment. Two factors were associated with vocational programming and two involved the client components of psychosocial functioning level (as measured by the GAS¹) and the demographic feature of age. The authors, however, recognized the importance of other demographic information including gender, age, and race and included these features in their investigation.

The researchers conducted a logistic regression analysis on data collected from 448 clients exhibiting various psychopathologies and receiving services within a vocational rehabilitation program. Gender, race, and education were not related to employment status at a 6-month follow-up. However, a positive relationship between GAS rating at follow-up and employment was found as well as a weak yet significant relationship between age and employment. These findings suggested that older individuals are less likely to be employed at follow-up. In fact, older clients paired with low GAS scores were the least likely to be employed at follow-up regardless of positive factors including ability to maintain independent employment and continued vocational support. Thus, the probability of being employed appears to decrease with lower functioning levels and age. Furthermore, these findings continued to demonstrate significance when controlling for client demographics, hospitalization history, and employment history (Cook & Rosenberg, 1994).

While some discussion was given to the interplay of functioning and independent employment, surprisingly, the findings regarding age were not discussed further, especially in terms of what age was considered an "older individual" and what implications such findings have for vocational rehabilitation planning and services. Like the aforementioned study by Rogers et al. (1991), Cook and Rosenberg (1994) emphasized the importance of specific vocational rehabilitation features such as the importance of continued support and independent employment experiences.

Fortunately, specifics regarding age were found in the Disability Statistics Report of NIDRR (Trupin, Sebesta, Yelin, & LaPlante, 1997). Three age groupings, 18-44, 45-54, and 55-64, were identified. Labor force participation rates for Individuals in the Disabilities Due to Mental Illness category and in the age range of 18-44 consistently fell far below those of all persons with disabilities in this age group (Trupin et al., 1997). Although persons in the disability group with mental illness were "on average, younger than the typical person with a disability," labor participation rates for this group were 25 percentage points lower than other disabilities groups in every year from 1983 to 1994 (Trupin et al., 1997, p.2). This is astounding information when considering that most people are typically employed between the ages of 18 and 44.

A study conducted by Fabian (1992) addressed demographic features such as race, gender,

¹Global Assessment Scale, an earlier version of the Global Assessment of Functioning (GAF) Scale.

and education as well as diagnostic grouping, employment history, and receipt of SSI or SSDI. She investigated 249 individuals with serious mental illness referred to a supported employment program and compared demographic variables among those individuals achieving placement (n=90) to those without placement (n=159). The only characteristic found to significantly distinguish the two groups was the level of education, which suggested a larger percentage of individuals with at least a high school education among those placed (90% versus 79%). However, when the level of education was investigated as an individual client predictor variable and categorized in groupings according to less than a high school diploma, high school diploma and some college, and a college degree or more, no significant difference was found.

Studies specifically addressing gender implications among this population included Cook and Jonikas (1997). The authors discussed four special populations: women, victims of abuse, ethnicity, and youth. In regard to women, various studies reviewed identified the multiple roles women commonly hold (e.g., child care, housework, family) and the implications of each role for vocational rehabilitation and the need for more precise research in this area. Cook and Jonikas stated that research addressing the impact of gender on employment outcomes was largely inconclusive.

In contrast, many studies continue to demonstrate evidence that women with disabilities parallel women in general in American society in terms of lower employment rates and salaries in comparison to their male counterparts. Cook and Jonikas (1997) cited several studies finding significant differences for gender and employment outcomes including earnings (Danek, 1992; Menz, Hansen, Smith, Brown, Ford, & McCrowey, 1989; Vash, 1982). The study of Cook and Rosenberg (1994) also pointed out the work of Test and Berlin (1981) that found lower employment rates and lower earned income levels for women compared to men among individuals with serious mental illness. In addition, the researchers provided the earlier findings of Cook (1992) that included significantly less group placements in a psychosocial rehabilitation program for women when compared to men despite a more positive finding for women regarding a significantly longer average job tenure.

Of interest are the results by NIDRR in the Disability Statistics Report regarding gender differences in the population of individuals with psychiatric disabilities (Trupin et al., 1997). Labor force participation rates for persons with disabilities due to mental illness between the years of 1983 to 1994 are "striking for two reasons": (a) that the magnitude and temporal pattern of the rates are very similar for both men and women; and (b) as the rates for this group fall far behind all other disability groups, the discrepancy was even more pronounced among men (Trupin et al., 1997, p.10). Apparently, the latter finding differs from society at large where men consistently demonstrated higher labor force participation rates than women across all disability groups.

While the above longitudinal study of Rogers et al. (1991) regarding 275 individuals with psychiatric disabilities in three psychosocial rehabilitation centers found no difference between employed and unemployed individuals regarding the variable of race (white versus nonwhite), numerous studies have demonstrated otherwise. Cook and Jonikas (1997) cited two previous studies demonstrating the influence of client ethnicity on employment outcomes. From a discriminate function analysis of 653 clients of a psychosocial rehabilitation transitional employment program, one study found that minority clients (80% African Americans) were significantly less likely to move from transitional placements into competitive employment (Cook & Razzano, 1995). In the second

study mentioned, Cook and Roussel (1987) reported that white clients had significantly greater earnings and acquired higher level jobs in comparison to minorities (primarily African Americans), even when controlling for work history, illness history, and other demographic variables. In addition, Cook and Jonikas (1997) posited that receipt of lesser benefits from vocational efforts may result in greater job dissatisfaction regarding employment obtained through vocational rehabilitation services.

In addition, a longitudinal study conducted by Fabian (1992) used survival analysis to investigate the long-term supported employment outcomes for 249 individuals with serious mental illness. Minority status and job loss were investigated with other demographic characteristics, diagnosis, employment history, SSI/SSDI information, and level of education. With termination from the first job placement as the failure event in the survival analysis, the study identified the proportion of individuals retaining employment and the probability of continued employment. The author compared two groups including individuals successfully placed in supported employment and those referred to the program but not placed.

In the further investigation of the 90 individuals who obtained placement in supported employment, psychiatric diagnostic categories and race were found to be significantly associated with survival outcomes in employment under examination of survival probabilities. Fabian (1992) expressed concern regarding the differences in employment survival outcomes among the minority and Caucasian subgroups. Within the first month of employment, 25 percent of minorities terminated employment while only 11 percent of non-minorities were discontinued. Fabian pointed out the inconsistent research findings for minority vocational success rates and included the caution of Douzinas and Carpenter (1981):

It may be that race is such a complex variable, comprising such factors as socioeconomic status and level of education that, coupled with its interaction with critical setting variables (e.g., job discrimination), interpretation of its effects is often confounded. (p. 31)

In conclusion, the relationship between the demographic variables and research outcomes were largely inconclusive. Many studies do not reveal statistically significant relationships between variables such as education, race, age, or gender; there does appear to be general trends that emerge based on common sense.

Symptoms, Severity, and Diagnoses

Research regarding psychiatric disabilities has traditionally investigated symptomatology, severity, diagnostic categories and their relationship to employment outcomes. Overall, varying definitions of psychiatric disabilities, diagnostic groupings, and descriptions of vocational outcomes can be found (Cook & Rosenberg, 1994). In an article by Anthony and Jansen in 1984, studies of the 1960s through 1980s were reviewed as to their findings regarding vocational outcomes. One area addressed was the predictability of vocational functioning from psychiatric symptoms. Many studies were cited that demonstrated a lack of relationship between psychiatric symptomatology and future work performance (e.g., Ellsworth, Foster, Childers, Arthur, & Kroeker, 1968; Green, Miskimins, & Keil, 1968; Gurel & Lorei, 1972; Lorei, 1967; Möller, von Zerssen, Werner-Eilert, & Wuschenr-

Stockheim, 1982; Schwartz, Myers, & Astrachan, 1975; Strauss & Carpenter, 1972, 1974; Wilson, Berry, & Miskimins, 1969).

In contrast, a longitudinal study of 275 participants with psychiatric disabilities at three psychosocial rehabilitation centers by Rogers et al. (1991) found a statistical significance between symptomatology, as assessed by the Brief Psychiatric Rating Scale, at follow up and employment status. This study also investigated symptom severity and found less severe symptoms in individuals who were employed at intake and at the end point of the study. While these findings contrasted with earlier research by demonstrating a relationship between symptom expression and employment outcomes, a significant difference was not found between employed and unemployed groups regarding ratings of symptomatology for subjects in the study for one or more years.

Beyond the contrasting views regarding symptom presentation and employment outcomes, the utility of considering the nature and intensity of symptomatology was evident. A study of Anthony, Rogers, Cohen, and Davies (1995) investigated the type of symptomatology in various psychopathologies. Higher levels of symptoms were found among individuals with psychiatric disabilities subsequently unemployed as well as a greater amount of negative symptoms. The researchers also discovered greater symptom severity to be related to poor work skills.

Other research has investigated psychiatric symptomatology in terms of broad categories such as psychotic versus neurotic groupings. For example, Wilson, Berry, and Miskimins (1969) found a greater number of neurotic (versus psychotic) individuals to be employed at follow-up. More recent studies replicated this association between neurotic or non-psychotic diagnoses or classifications and greater likelihood of successful vocational outcomes (Lieberman, 1989). Disability Statistic Report findings of NIDRR investigated labor force participation rates among persons with disabilities due to selected discrete conditions in order to identify particular conditions behind the labor force participation trends. Between the years of 1983 to 1994, for the category of persons with disability due to a mental illness, an increase of 46.1 percent in labor force participation rates was found for persons with neurotic disorders (Turpin et al., 1997).

However, some earlier studies found no relationship between non-psychotic diagnoses and successful employment outcomes. For example, research conducted by Sturm and Lipton (1967) and Watts and Bennett (1977) did not demonstrate an association between any sort of psychotic or neurotic classification and employment outcomes.

Beyond the investigation of broad diagnostic categories of non-psychotic or psychotic, many researchers have attempted to look for a possible relationship between clinical diagnoses and employment outcomes. In their review of research in this area, Anthony and Jansen (1984) cited nine studies, spanning from the late 1960s through the early 1980s, that revealed diagnostic categories as poor predictors of future work performance. The previously discussed 1991 study by Rogers et al., regarding findings for symptom severity, found no relationship between diagnostic categories and employment outcomes. In contrast, Fabian (1992) found that individuals unemployed at the 12-month point of the study had a diagnosis of schizophrenia.

Additional diagnostic considerations included co-morbid conditions, lending additional complexity to the investigation of psychiatric disabilities. Baron (1997), through the Matrix

Research Institute and Penn Research and Training Center, conducted a dual diagnosis study addressing individuals diagnosed with a serious mental illness and a co-existing substance abuse disorder. The study interviewed 105 clients from three agencies with some degree of vocational services integrated into their programs. Of the individuals under investigation, 28.6 percent had dual diagnoses of a mental illness and substance abuse disorder. However, this percentage was not deemed to accurately represent substance abuse among the seriously mentally ill population as the sample excluded individuals "who may have either occasionally or more frequently used or abused substances, but did not yet have a specific substance abuse diagnosis . . ." (Baron, 1997, p. 321).

The study found that even in settings with a reasonable degree of vocational services, individuals diagnosed with substance abuse and mental illness were less likely to receive vocational rehabilitation services (43.3% receiving and 56.7% without vocational services) than individuals with one diagnosis of mental illness. In addition, the most significant predictor of vocational status and vocational rehabilitation involvement for individuals of dual diagnoses was found to be a counselor who established a vocational goal in the treatment plan and investigated employment issues with the client.

Level of Functioning

Many studies have addressed the role of one's level of functioning in vocational success. Of nine major findings within the literature, Anthony and Jansen (1984) pointed out the common assumption that the assessment of symptoms and assessment of functioning are essentially redundant. The authors discussed two studies involving hospitalization. One study by Ellsworth, Foster, Childers, Arthur, and Kroeker (1968) was cited where hospital treatment demonstrated symptom reduction yet failed to impact instrumental performance. A second study cited, by Arthur, Ellsworth, and Kroeker (1968), found symptomatology but not instrumental behavior to be associated with hospital readmission. Thus, there does not appear to be a clear association between an individual's symptoms and his or her functional abilities. Anthony and Jansen (1984) also suggest that individuals with the same diagnosis may exhibit vastly different functional capacities.

A more recent study by Cook and Rosenberg (1994) specifically investigated the level of functioning in respect to vocational outcomes. The authors initially identified four factors deemed to be critical in predicting successful employment for people with mental illness. Two factors correspond to client characteristics—age at follow-up and the functional level of the client. In addition, Cook and Rosenberg took the position that level of functioning as a feature is often not associated with one's mental illness history.

The study investigated 448 individuals who exhibited various psychopathologies and received vocational rehabilitation services within 18 urban psychosocial rehabilitation programs. The participants' levels of functioning were determined by the Global Assessment Scale. The average functional assessment rating, as established by the GAS, was 49 at the program start and 47 at the 6-month follow-up. While this indicated little change in functioning levels on average, clients with higher levels of functioning at the conclusion of the vocational rehabilitation program were significantly more likely to be employed than individuals with lower levels of functioning. This demonstrated a link between employment and functioning levels following rehabilitation and suggested that initial functioning deficits may be overcome (Cook & Rosenberg, 1994).

A positive relationship was demonstrated between employment outcome and variables of both the GAS rating at follow-up and the age of the client. Older individuals were less likely to be employed at follow-up. In fact, older clients paired with low GAS scores were the least likely to be employed at follow-up regardless of positive factors including ability to maintain independent employment and continued vocational support. Thus, the probability of being employed decreased with functioning level and age. Furthermore, these findings continued to demonstrate significance when controlling for client demographics, hospitalization history, and employment history (Cook & Rosenberg, 1994).

Additional implications of these findings included the importance of maintaining vocational support for clients throughout their employment due to the significance of functioning on successful employment outcomes. The authors discussed how functioning in individuals with mental illness "is highly variable" thereby requiring access to ongoing vocational support (Cook & Rosenberg, 1994, p. 18). In addition, the importance of maintaining independent employment remained constant despite controlling for level of functioning. Thus, higher functioning does not singularly predict successful employment outcomes.

Beyond addressing the relationship between independent employment and functioning, Cook and Pickett (1995) looked at the interplay between higher functioning, quicker job placement, and greater job satisfaction. In addition to discussing their findings of a relationship between quicker placement and greater job satisfaction, the authors also posited that outcomes of higher job satisfaction and shorter placement time may be associated with higher functioning. A recommendation for further investigation of these connections was made in regard to possible implications for prevocational assessment and preparation.

A final consideration regarding level of functioning involved the conclusion made by Anthony and Jansen in 1984, based on several decades of study, that functioning in one area has little or no relationship to functioning in other areas; it is now standard practice in outcome research to assume little or no relationship between measures taken in two different areas of functioning. Thus, one's ability to function in one environment (e.g., a community setting) is not predictive of one's ability to function in a different type of environment (e.g., a work setting).

However, due to the inclusion of occupational and social functioning in DSM-III diagnostic procedures, diagnosis and vocational measures are not independently measured. In addition to general diagnostic practices, which take into account the possibility of impairment in various areas of functioning, the inclusion of the Global Assessment of Functioning (GAF) scale of the DSM IV as part of the multiaxial assessment procedure also works to integrate multiple areas of functioning. Perhaps this measure not only will facilitate diagnostic accuracy and the predictability of successful employment outcomes, but also will represent a more comprehensive view of one's level of functioning.

Life Satisfaction, Self-Esteem, and Self-Efficacy

Cook and Pickett (1995) discussed recent developments in the field of vocational rehabilitation, including the consumer empowerment movement (Cook, 1992). Additional trends involved the increasing consideration and drive for jobs that are not only competitive financially but

also add to the consumer's self-esteem and need for meaningful and rewarding employment (Fisher, 1994; Harp, 1994, in Cook & Pickett, 1995). The authors suggested that these more current developments are stimulating the investigation of the areas of self-esteem, life satisfaction, and job satisfaction and their association to successful or future employment outcomes (Cook & Pickett, 1995).

One study frequently cited in this area is that of Arns and Linney (1993) regarding the investigation of the subjective outcomes of self-efficacy, self-esteem, and life or vocational satisfaction. While the authors did not provide definitions of these concepts, the instruments used to collect the subjective measurements were discussed, including the Mastery Scale for the self-efficacy measure, the Rosenberg Self-Esteem Scale, and various parts of instruments for the Quality of Life measure. The researchers looked at 88 individuals with psychiatric disabilities at a large mental health center. Out of various multiple regression techniques, only a 6-month change in vocational status was found to be significantly and positively related to the subjective outcomes. These findings supported a rehabilitation outcome model whereby a change in vocational status contributes to greater self-efficacy, which impacts self-esteem and leads to an increase in life satisfaction ratings.

The authors discussed earlier research findings where strong relationships between vocational status and general life satisfaction were not found. Arns and Linney (1993) proposed that unemployment, due to its prevalency among individuals with serious mental illness, has become the norm for this population. This may explain the weak relationship between low life satisfaction and unemployment. The authors suggested that "a more precise standard of comparison may be the investigation a recent change in vocational status" (Arns & Linney, 1993, p. 65). Therefore, a change in vocational status (versus a measure of current, static vocational status) was proposed to increase the importance of that area of life domain and impact the evaluation of life satisfaction. Self-efficacy appears to be affected by change in vocational status and, thereby, stimulates improvements in self-esteem and life satisfaction. Because a change in vocational status may lead to greater self-efficacy, which affects self-esteem and ultimately increases life satisfaction ratings, the authors advocate looking at a change in vocational status. Thus, the relationship between self-esteem and life satisfaction is not a simple one but more likely is marked by complexity and an interplay of variables.

A study by Fabian (1989) investigated life satisfaction ratings related to gender and employment outcomes among individuals with psychiatric disabilities. Employed men were found to endorse greater life satisfaction ratings more than employed women. Fabian suggests that reports of lower life satisfaction for employed women may be due to mediating factors such as home life quality, child care, and the multiple roles required of many women.

Common Themes and Conclusions in the Outcome Prediction Literature

Demographic characteristics. While it would make sense that persons in their prime adult years would be best suited for employment, this does not appear to be the case according to labor force participation rates. Research did, however, find a trend that individuals advancing in years would demonstrate lower employment numbers.

Research confirmed that the greater attainment of education improved one's chances of employment among this population. However, it is difficult to determine exactly which factors contributed to more successful employment outcomes (such as the greater employment opportunities available to those with additional education, the corresponding stronger work history, or the higher level of intellectual functioning required to complete additional years of education).

Symptoms, severity, and diagnoses. The research investigating the relationship of symptomatology, symptom severity, and diagnoses to employment outcomes remains generally inconclusive. Studies regarding symptomatology and vocational outcomes tend to be divided. However, more recent studies appear to have found a relationship in this area, especially in terms of specifics of symptomatology. Trends appear to be emerging regarding symptoms of a negative presentation, of greater severity, and of greater number and the relation to poorer vocational outcomes. In addition, psychotic diagnoses, such as schizophrenia, typically fare worse in the vocational area, which may be linked to a greater level of severity, negative symptoms, and/or perhaps number of symptoms. Dual diagnoses, common to the mental illness population, tend to further complicate the diagnostic picture and lend to greater complexity in symptomatology, which is likely to affect vocational functioning.

Level of functioning. While there is minimal research investigating the possible interaction between level of functioning and employment outcomes, the findings available are interesting. It seems logical that functioning varies per realm of life and that a diagnostic label cannot indicate specifics of functioning across individuals. Furthermore, a higher functioning individual, as reflected by a higher GAS/GAF rating, would be more apt to obtain employment. It also seems logical that level of functioning cannot solely predict successful employment outcomes. The level of functioning would inevitably be affected by age or employment. It is exciting that Cook and Rosenberg (1994) suggest that initial functioning deficits may be overcome; this has implications for vocational rehabilitation programming leading to greater employment outcomes.

A final consideration is that current diagnostic procedures tend to address various domains of functioning such as the areas of symptomatology, social/interpersonal, and vocational or academic. By reviewing several areas of functioning and integrating them into a diagnosis or GAF rating, a clinician can develop a more comprehensive view of the client and his or her level of functioning. The recognition of occupational functioning within the GAF rating thereby increases the likelihood that a GAF score would reflect to some degree the potential for a successful employment outcome.

Life satisfaction, self-esteem, and self-efficacy. While these three subjective outcomes were found to be related to positive vocational outcomes, their relationships were weak and open to speculation. This relationship can be envisioned as a cyclical phenomenon in which employment success increases life satisfaction, self-esteem, and self-efficacy. These three variables then reinforce vocational performance, which leads in turn to their increase.

Another issue relates to whether increases in positive regard for oneself precede or follow a positive change in vocational status. In other words, what starts the cycle? Does a person first begin to believe he/she has the potential to work (i.e., increase in self-esteem), then become involved in a vocational program leading to employment; or does self-esteem, life-satisfaction, and self-

efficacy increase after employment. The answers to these questions have implications for program planning.

Conclusions. The following conclusions are offered:

1. The demographic characteristics of age, education, race, and gender have an inconsistent relationship to outcomes.
2. While symptom severity and diagnosis appear to be related to vocational outcomes, a much stronger relationship exists between level of functioning and vocational outcomes.
3. Although subjective outcomes have a positive relationship to change in vocational status, this relationship is weak and difficult to measure. Therefore, emphasis should be placed on measuring more objective outcomes when investigating program outcomes.
4. One of the major problems with outcome studies is a lack of consistency as to what is an acceptable outcome, how this outcome is to be measured, and how important this outcome is.
5. Increased self-concept, self-esteem, and an understanding of one's symptoms have a weak positive relationship to vocational outcomes.

The studies cited above as well as others reviewed but not included did not yield a highly consistent list of variables related to employment outcomes. There are two possible reasons for this. First, outcome research is plagued by various methodological flaws, characterized by confounding variables such as uncontrolled program effects and devised in ways that fail to promote progression and unity within the findings. Thus, such orientations and research attempts frequently demonstrate inconclusive findings and/or contending themes among studies regarding many predictor variables or vocational outcomes.

A second reason for a lack of consistent results may be due to individual differences among consumers. All of these studies classify consumers according to one or more dichotomous or continuous variables and then attempt to relate these variables to outcomes. Persons with psychiatric disabilities are individuals and as individuals they behave uniquely in many situations. Thus, not all middle-aged males with schizophrenia will obtain the same results from participation in a specific vocational program.

Because each is a unique person, we cannot expect anything but unique responses. A variety of unique responses results in an inability to measure and predict outcomes. Quite simply, outcomes are more related to individual consumer experiences, skills, aptitudes, physical conditions, support level, desire to work, employment and educational histories, and unique individual disability characteristics than they are to diagnostic and demographic classifications forced on them by researchers. In conclusion, the failure to find consistent results can in part be attributed to distinct ways that mental illness interacts with each consumer. This has two ramifications: Consumers and staff need to carefully plan individual programs and outcome research must be more sensitive to individuals differences and development methods for determining why each person was successful or not.

Transfer From Literature to Methodology

Many of the ideas from the literature review were directly applied to this study's methodology. While the formal diagnosis, symptoms, and severity needed to be included as variables, it was much more important to obtain a reliable measure of the consumer's present level of functioning. There are a variety of measures used to evaluate program outcomes. In order to obtain objective outcome measures, employment status and employment related variables were the major outcomes. Because life satisfaction is a more inclusive concept than self-esteem and self-efficacy, it was included as a subjective outcome measure.

The literature indicated the need to place the emphasis on the individual consumer and his/her differences. Therefore, this study placed considerable emphasis on the consumer's life history, present conditions, feelings about employment, family, and related issues. Much of this emphasis is reflected in the items included in the consumer interview.

Relevance of Career Development Theories for Persons With Psychiatric Disability

There is an abundance of literature available on the placement and employment of persons with psychiatric disabilities; however, there is very little dealing specifically with career development among this group of persons.

Career Development Theories

Career development theories place little emphasis on the special needs of people with disabilities, much less persons with psychiatric disabilities. Because the ideas expressed in the various theories have had considerable influence on vocational rehabilitation service provision, a short review of these theories is provided.

Major career development theories. Holland's Topology (1985) Theory suggests that individuals can be classified into one of six personality types: realistic, investigative, artistic, social, enterprising, and conventional. Work environments can also be categorized as one or more of these six types. Holland's theory further suggests that individuals seek work settings congruent with their personality. Therefore, occupational choice is determined by the worker's personality. A shortcoming of this theory is that it does not consider what occurs when a person with an acquired disability can no longer competitively perform within a preferred work environment. Also, Holland does not address the role of congenital disability; apparently he does not consider it to play a role in occupational choice.

Super's Theory of Career Development (1990) states that individuals pass through life stages and that there are life roles. Occupational choices are determined by a person's attitudes, interests, and aspirations. Self-concept changes as attitudes, interests, and aspirations change have a direct impact on our career development. Super also addressed the concept of career maturity:

Career maturity is defined as a constellation of physical, psychological, and social

characteristics; psychologically, it is both cognitive and affective. It includes the degree of success in coping with the demands of earlier stages and substages of career development, and especially with the most recent. (Hershenson & Szymanski, 1992, p. 276)

Although Super (1990) has considered disability more than other career development theorists, career maturity still does not fully consider the unique problems of persons with disabilities. As a result of the effects of the disability per se and the accompanying problems of social isolation, unemployment, lack of education, and lack of "normal experiences," persons with congenital disabilities often will have low career maturity compared with other persons of the same age. Persons with disabilities often do not have opportunities to pass through the same life stages or have the same life experiences as people without disabilities. This theory assumes normal experiences (i.e., life stages and life roles), which raise the following questions: What is a normal experience? Do normal experiences differ by geography, social class, or social environment? What impact does a disability (congenital or acquired) have on normal experiences or vice versa?

Krumboltz's (1994) Social Learning Theory views occupational choice as influenced by the following key elements: environment, genetics, learning experiences, and task approach skills. The combination of these elements influences beliefs, actions, and ultimately, vocational decision-making processes. Career development slows when persons have poor decision-making skills or a negative self-concept. Krumboltz's theory encourages exposure to a wide variety of learning experiences to enhance decision making and further develop a positive self-concept.

Although the role of disability is not directly addressed by Krumboltz's (1994) theory, the emphasis on learning and change corresponds to vocational rehabilitation values and processes. For example, exposure to a wide variety of learning experiences (e.g., vocational evaluation, career education, work experiences) may improve consumers' self-concepts and assist in the discovery of potential career opportunities available to them. However, the Social Learning Theory may not be appropriate for persons with certain acquired disabilities (i.e., traumatic brain injury) who may not be able to draw from previous learning experiences or whose past learning experiences may not be applicable due to the nature and/or timing of the disability.

The Minnesota Theory of Work Adjustment was developed under funds from the Rehabilitation Services Administration and includes disabilities in theoretical structure (Dawis, 1994). The theory of work adjustment suggests that a person's job satisfaction is directly related to hi/her reinforcer system and how these needs are met. In practice a person's reinforcer system is matched against occupations that meet the person's needs. This process is analogous to matching a person's aptitudes to the aptitudes required by a specific job. Unlike other theories described above, the Minnesota Theory of Work Adjustment was built upon research that provides data for specific occupations.

Career development and disability. McMahon (1979) presents a vocational redevelopment model for people with acquired disabilities, with the exception of acquired brain injury, in a theory derived from the Minnesota Theory of Work Adjustment. This model is concerned with only the vocational aspects of the disability; physical and psychological aspects are not addressed. McMahon's model uses

four basic elements (worker needs, worker competencies, job reinforcers, and job demands) and their phenomenological counterparts to elucidate critical aspects of redevelopment, such as the worker's self-assessment and job understanding, the impact on disability, occupational reselection, and broad categories of vocational behaviors. (p. 35)

Differences between perceptions and true values or real status are examined from the four basic elements to determine a worker's self-assessment and job understanding. Dobren's (1994) theory was developed from this model (see below).

A review of the literature on acquired mid-career disabilities by Dobren (1994) reached two conclusions. One is relevant to the current topic and suggests that "none of the existing theoretical models provide a comprehensive framework for understanding the vocational behavior of persons with acquired mid-career disabilities" (pp. 215-216). Traditional vocational theories were originally geared toward normal experiences, lacking attention to persons with acquired disabilities and the contextual variables that affect them. Dobren's model of human ecology addressed these previously unaccounted for contextual variables. He divided contextual variables into the following domains: economic, physical, rehabilitation systems, and social variables. Of these variables, contextual variables involving rehabilitation systems were the only variables that occur after onset. These four variable types provided a useful framework for classifying criteria. Understanding contextual variables can change the focus from adapting the individual to the environment to adapting the environment to the consumer.

An article by Goldberg (1992) provided additional insight into career development theories and disability. This article served four purposes: (a) examined the applicability of prominent vocational development theories to people with disabilities, (b) evaluated research pertinent to the vocational development of people with disabilities, (c) described a scale of vocational development designed specifically for people with disabilities, and (d) presented a model of vocational development for people with disabilities. Goldberg reviewed the vocational development theories of Super (1990), Roe (1977), Holland (1985), and Tiedeman and O'Hara (1963), noting that those theories were based on normal experiences with little regard for people with disabilities. Persons with acquired disabilities had the same career values and aspirations that they previously held and vocational objectives remained the same as those established in adolescence. For people with congenital disabilities, occupations were determined by their parents' ambitions and their parents' social class standing. This article indicates that outcomes are affected by age of onset, by parental social class, and by vocational aspirations.

Mutran and Reitzes (1989) examined the relationship between labor force participation and health and found that past experiences, the consumers' health, and their perceptions of the job had a direct impact on their return to labor force participation. An acquired disability not only had a negative impact on health but could potentially decrease the worker's feelings of self-worth. Low prior job satisfaction decreases the likelihood of the worker's returning to work. The immediacy of supervisor support determined whether or not the worker returned to work. The article concluded that job satisfaction and health directly influenced labor force participation. Labor force participation, job satisfaction, and health may all be directly affected by an acquired disability. Persons with a congenital disability may also experience limited labor force participation due to

health problems and lack of career experience.

In general, it is assumed that career development for persons disabled as adults was normal up to the onset of the disability. Goldberg's (1992) review indicated that previous interests, work values, and career plans were maintained by individuals after acquiring a disability. Although persons disabled as adults share these common characteristics, each age and disability group represents a different profile. Career development is a long-term process; Rothman (1987) notes that careers must be seen from a longer perspective than a single job. Jobs are often viewed as being short-term work, typically lasting between six months and two years.

Career development for most people begins to crystallize in teen-age years and early twenties, with careers established by the early thirties. If a person acquires a serious disability during this time, the entire process may be interrupted. Persons with acquired disabilities often need to return to the point at which their career growth was interrupted. This is especially relevant for persons with psychiatric disabilities. Formal education and first employment experiences are either not started or not completed with the consumer losing several years of critical education and employment experiences that are difficult to "make up."

Ciadiello and Bingham (1982) examined the impact that symptoms associated with schizophrenia (i.e., ego dysfunctions, pathological thought, low self-esteem, and distorted self-knowledge) had on vocational development. People with schizophrenia had very limited work experience, poor social skills, and were in a stage of early vocational development with a need to further develop social, leisure, and work roles in order to create their own career destiny. Structured experiences (i.e., observing the consumer work) were recommended to assist in appraising the consumers' abilities, selecting appropriate goals, and building self-esteem.

Disabilities acquired later in life, after a career has been established and the worker has reached a level of experience and competency, may not be as disruptive to careers as might be expected if they occurred earlier in career development. Some examples of later-life disabilities are a nurse with a low back injury at age 45, a teacher with 18 years of experience before becoming depressed, and a master machinist with a repeated-use injury. We can assume they had normal career development up to the point of the accident, illness, or injury. Such persons have numerous years of job experience, commitment of career, and family obligations that encourage them to return to previous careers or build new careers.

As a worker becomes older, however, there is an increased tendency to retire or claim disability if an injury occurs on the job. Roessler and Schriener's (1991) article focused on industrially injured people between the ages of 25 and 60. Less than 50 percent of people out of work for five months due to the severity of the disability will return to work. Factors that decrease the likelihood of an employee returning include stereotypes, poor or nonexistent workplace interventions, fear over potential social security benefits, and conflicting professional advice.

Generally, people with psychiatric disabilities take longer to establish careers than the "normal" population. Psychiatric disabilities often mean that a consumer loses several years of productive work. Most job programs center only on finding the consumer the best job available at the time of placement with little emphasis placed on longer-term career issues, such as career

advancement, occupational prestige, and job satisfaction.

Common Themes and Conclusions From Career Development Theories

This section has presented a variety of career development and work adjustment theories and has related these concepts to career development for persons with disabilities.

1. Although there are numerous theories of career development, these theories pay little attention to disability. Where disability is mentioned, it was often in the context of lack of "normal" experiences and the effects of these experiences on occupational information and vocational maturity.
2. For persons with disabilities, age of onset is considered a critical variable, both in theory and practice. In general, the later in life that a person becomes disabled the more his/her career development will correspond to that of the general population.
3. There is limited research on career development for persons with psychiatric disabilities. However, the literature suggests that most persons with psychiatric disabilities do not have careers; they simply have jobs.

Transfer From Literature to Methodology

None of the career development theories reviewed in this section adequately deal with career development of persons with disabilities and, specifically, psychiatric disabilities. One way of overcoming this deficiency is to accurately describe the higher education and employment of consumers prior to entry into Minnesota Mainstream. This objective provides valuable information about what happens, rather than what theories anticipate. Therefore, one of the major data collection instruments focused on obtaining the consumer's educational and employment histories. Because the conclusions placed considerable emphasis on how age of onset affects career development, we included the ages of consumers at critical events in their lives.

Chapter III

Methodology

This study had two objectives: The first was to investigate the outcomes of the Minnesota Mainstream program and determine the program's effectiveness. The second was to provide a detailed description of this population, especially their vocational and education histories. The literature review, study design, and data collection centered on the two themes of outcomes and career development. Data collection instruments were developed from the specific research questions in the Introduction and were guided by the Constituency Advisory Committee, the literature review, and Research and Training Center staff experience. This study obtained information on program operation; program outcomes; and consumer demographics, career history, and living conditions. While this research centered on a sample of 48 consumers who were involved in the Mainstream program between 1989 and 1996, Mainstream staff and mentors provided information on the Mainstream program per se and their involvement in it. Data collection was through interviews with consumers, staff, and mentors and from a consumer questionnaire.

Development of Constituency Advisory Committee

Both the Center and Rise, Inc., have an ongoing commitment to meaningful involvement of consumers in their programs. Minnesota Mainstream direct service staff participated in all phases of the study. They helped develop the research questions, design the content and format of data collection instrument, design methods to maintain consumer confidentiality, and extract all data from case records needed to define the sample. Because all Minnesota Mainstream direct service staff had a history of psychiatric disabilities, their suggestions and recommendations were especially insightful.

In addition, a formal Constituency Advisory Committee (CAC) consisting of three consumers, two Minnesota Mainstream direct service staff, and one Rise, Inc., administrator was formed. The three consumers had participated in the Minnesota Mainstream program in the recent past, and all were employed during their involvement in the study. One consumer had training in social science research methods. The CAC critically reviewed the consumer questionnaire, consumer interview, mentor interview, and staff interview with each item evaluated against the research question it was designed to help answer. The members reduced the length of the consumer interview, added ratings to quantify responses, and made certain the data collection procedures ensured consumer anonymity. After data analysis was completed, the CAC met again to review the results of the study, offer interpretations of these data, and decide what topics should be included in the final report.

Instrument Development

Three different sets of data collection instruments were developed for consumers, mentors, and Mainstream staff.

Consumer Instruments

Information about the consumers' careers, educational and employment histories, participation in the Minnesota Mainstream program, present activities, and psychiatric disabilities formed the basis of the consumer data collection instruments. Consumer information was collected by two different methods: (a) a Consumer Questionnaire was mailed to the consumer prior to the interview, and (b) a semi-structured interview during which the Consumer Interview Protocol and the Rating and Ranking Supplement were administered. The research questions directed the development of the three instruments. After a CAC review, each instrument was piloted on Center staff and university students and then on Minnesota Mainstream consumers. (Examples of each instrument are in Appendix A. Table 3-1 shows the relationship between the instrument sections and the seven research questions.)

1. *Minnesota Mainstream Consumer Questionnaire.* The employment and education sections of the questionnaire obtained information on career development, career patterns, and consumer outcomes. Demographic, family medical history, disability information, and present living conditions provided background information. In general, the questionnaire collected the more objective data.
2. *Minnesota Mainstream Consumer Interview Protocol.* The final version of the Interview Protocol was designed to be administered in between 45 and 60 minutes. This instrument contained eight general topics, each followed by more specific questions. These items sampled the consumer's present feelings about careers and employment, past and present life, values, and psychiatric disability. The underlying purpose of these interview items was to create an understanding of the consumers and their lives.
3. *Minnesota Mainstream Consumer Interview Protocol Rating and Ranking Supplement.* This final consumer instrument provided a quantifiable summary of the general topics covered during the interview. Each interview topic contained one or more ratings or ranking items that quantified the characteristic, value, emotion, or behavior in question.

Minnesota Mainstream Mentor Interview Protocol

The process of mentoring from the mentor's perspective came from this interview. A study objective was to determine why persons became mentors and what they obtained from the experience of helping a Minnesota Mainstream consumer. A second goal was to investigate the mentoring process per se so that this process could be duplicated. Within this instrument, only questions 2a through 2d relating to the Mainstream program and questions 3a to 3d relating to the consumer mentored were used in the data analysis. These two series of items were related to research question 1a *What is the Minnesota Mainstream Program.*

Table 3-1. Relationship Between Research Questions and Consumer Instrument

Research Question	Consumer Questionnaire	Consumer Interview	Consumer Rating and Ranking Supplement
1a. What is the Minnesota Mainstream (MM) program?		2. About MM.	2c. Rank Importance of MM Services. 2f. Happy With Mentor. 2h. Satisfaction With MM Services.
1b. What are the demographic characteristics of the consumers in the Minnesota Mainstream program?	Demographic Information. Disability Information.	8. Present Psychiatric Disability.	
1c. What are the vocational outcomes of the Minnesota Mainstream program?	Employment History.	1. Present or Most Recent Job.	
1d. What are the consumers' present levels of functioning?	Present Living Information.	3. Present. 5. Disability ... Career Development. 8. Present Psychiatric Disabilities.	1e. Happy With Present ... Job. 3e. Satisfied With Life at Present. 4d. Satisfaction With Life Prior to Onset. 5e. Satisfied With Career Development. 7d. Satisfied With Personal Qualities. 8f. Managing Mental Health Condition. 8g. Percentage Cope With Mental Health.
2a. What were the higher education and employment histories of consumers in the Minnesota Mainstream program?	Military History. Educational History. Employment History.	1. Present or Most Recent Job.	
2b. Are objective career development patterns identifiable?	Disability Information. Educational History. Employment History.		
2c. What are the consumers' attitudes and values about employment and having a career?		6. Meaning of Employment. 7. Personal Qualities. 8. Present Psychiatric Disabilities.	6b. Rank Order of Life Values. 6e. Importance of Employment.

Minnesota Mainstream Staff Interview

This interview obtained detailed information on how the program was developed, the procedures and processes used, and what staff perceived as the most important aspects of the program. The same instrument was used for both direct service and management staff. Interview items were developed from Minnesota Mainstream printed materials, CAC suggestions, and Rise, Inc., management suggestions. Interview time was between 60 and 90 minutes. All items were related to the research question 1a *What is the Minnesota Mainstream Program?*

Global Assessment of Functioning

The consumer's overall present level of functioning was determined through the use of the Global Assessment of Functioning (GAF) (American Psychiatric Association, 1994). The GAF requires that a single score of between 1 and 100 be assigned; the higher the score the higher the level of functioning. Specific procedures for assigning a GAF score are presented on page 27. This score related to the research question 1d *What are the consumers' present levels of functioning?*

Consumer Privacy and Human Subjects Protection

A goal in instrument development was to maintain balance between obtaining useful data and not invading the consumer's privacy. Each item was reviewed by Center staff and the CAC to determine if (a) it was required to answer one of the research questions and (b) it asked for information that was too sensitive or too personal. Informed Consent Forms (Appendix B) were also developed. The consent forms, copies of all data collection instruments, and a description of the procedure used to select and contact the consumers were reviewed by the University of Wisconsin-Stout Protection of Human Subjects Committee. This group follows all U.S. Department of Education as well as University of Wisconsin-Stout policies for conducting research with persons. This committee approved the data collection forms, informed consent forms, and the method of contacting consumers.

Several procedures protected the anonymity of consumers and mentors. Minnesota Mainstream staff began sampling and data collection by completing a Sample Identification Form for Minnesota Mainstream. From that time until the consumer arrived for his/her interview, neither the principal investigator nor his staff knew the identify of any Minnesota Mainstream consumer. After the interview, all materials were sealed and removed from the site by the interviewer or the principal investigator. Upon return to the Center, the records for each consumer were reviewed by the principal investigator for inconsistencies; these records were then placed in locked files in a secure room. From this point on, only four persons had access to the records: the principal investigator, a research assistant completing her doctorate in clinical psychology, and two clerical staff who entered the data. All consumers and mentors were identified in the data bases only by an identification number. Following data entry, all consumer records were again removed to a secure area.

In order to protect the anonymity of consumers and mentors, some of the information in this report has been adapted to remove potentially identifying terms. However, all consumer and mentor responses included in this report capture the essence and underlying themes of the interviews.

Selection of Consumers and Mentors

Selection of Consumers

Between December, 1989, and March 1, 1996, the Minnesota Mainstream program had contact with 207 persons, 187 of whom received services for at least three months. A sampling form was developed by the principal investigator and Minnesota Mainstream staff (see Appendix C for Sample Identification Form for Minnesota Mainstream) to collect relevant data about each of these 187 consumers. Each consumer was assigned an identification number which he/she retained throughout the study. In order to protect the confidentiality of program participants, all data needed to define the sample were collected and recorded by Minnesota Mainstream staff.

An original concept of this study centered on identifying successful and not successful outcomes and then identifying predictors of program outcomes. Mainstream consumers were classified into one of three outcomes: unemployment, competitive employment, and other. Consumers in the "Other" were engaged in non-employment, productive activities, such as continuing education, searching for employment, or caring for children. A random sample of 100 consumers stratified by employed/unemployed and year of program entry was selected. Identification numbers for the 100 selected consumers were sent to Minnesota Mainstream staff who matched the number with the consumer's name and last known phone number and address. Mainstream staff then contacted consumers and scheduled interviews. If a consumer could not be contacted or refused to participate, another consumer from the same sample category was selected. This procedure was followed until all 100 persons in the original sample had been contacted. At that time we had completed only 27 interviews.¹ The principal investigator changed the sampling method and asked Mainstream staff to contact all consumers. The total number of consumers in the study was 48.

Mentor Interviews

Mainstream staff selected, contacted, and invited mentors to participate a 30-minute interview. Only 6 of approximately 40 mentors were interviewed for the following reasons: While it was estimated by Mainstream staff that about half of the consumers had mentors, many mentors had changed employers within the Twin Cities, others had moved from the area entirely, and a number declined to be interviewed.

Minnesota Mainstream Interviews

Four interviews were conducted with Minnesota Mainstream: two with direct service staff, one with the first-line supervisor, and one with the second-level manager. Interviews with staff and supervisors took between one and two hours.

¹The most common reasons for non-participation were: consumer refused, lost contact with consumer, and consumer moved from St. Paul-Minneapolis area.

Procedures

Interviewers

An interviewer was hired part-time to assist the principal investigator. This interviewer had over 10 years of experience in the criminal justice system as a professional and was experienced in interviewing persons from a wide variety of backgrounds. After she was hired, the interviewer and the principal investigator taught each other the consumer interview protocol. After six hours of this training, the principal investigator observed two interviews between the interviewer and consumers. Of the 48 consumer interviews, 23 were completed by the interviewer and 25 by the principal investigator. Each interviewed approximately an equal number of men and women. The two interviewers maintained quality by reviewing each other's interview tapes, identifying potential problem areas, and discussing these during frequent meetings.

Consumer Interviews

Preliminary contact and scheduling. After the selection of a consumer's identification number by the principal investigator, the consumer was contacted by Minnesota Mainstream staff and asked to participate. If the consumer agreed, he/she was scheduled for the interview and mailed a release form (see Appendix B), summary of the study, and the Minnesota Mainstream Consumer Questionnaire. Each interviewed consumer was paid \$25 for the completion of the Questionnaire and the Interview. Interviewers did not know the name of the person they would be interviewing, but were informed of the gender and approximate age of the consumer so that the consumer could be identified upon arrival.

Except for one telephone interview, all interviews were held at the Rise, Inc., central office, an urban location in northeast Minneapolis. Many interviews occurred in the evening after normal business hours because most of the consumers were employed. If a consumer missed a scheduled interview, the interviewer waited 30 minutes for him/her to arrive. At the end of that time, the interviewer contacted Mainstream staff and asked them to contact the consumer to reschedule the interview.

Interview procedures. The interviewer introduced himself or herself to each consumer and thanked the consumer for coming. Following introductions, the interviewer reviewed the consumer's completed questionnaire and asked the consumer about missing or confusing information. The consumer was informed that participation was voluntary, he or she could leave when desired, he or she could refuse to answer specific questions, and all information was confidential and would not be shared with Rise, Inc., staff. A signed and witnessed release form and the consumer's name, address, and social security number were obtained so the consumer could be paid.² Finally, each consumer was asked if the interview could be recorded on an audio-cassette.³

²Consumers were mailed a check from Rise, Inc. By having Rise, Inc. issue the checks, persons in the University's accounting department did not know the identity of the consumers.

³Two consumers did not want the interviews taped and another consumer asked for a copy of the interview tape.

At this point the interviewer started the tape recorder and began the Consumer Interview Protocol. For each item, the interviewer wrote a brief summary of the response on the protocol. Interviews took between 45 and 75 minutes, with most being slightly less than 60 minutes. While most of the topics covered were emotionally neutral, some often resulted in emotional responses: items about career growth (3c), how would you change your life (3d), career changes resulting from disability (5c), symptoms of disability (8d), and knowing when becoming dysfunctional (8e).

Following the interview, the consent form, questionnaire, rating and ranking supplement, and the audio-tape(s) were sealed in an envelope and identified by the consumer's identification number, the interviewer's name, and the date and time of the interview. These were removed from the interview site.

Mentor Interviews

Prior to beginning the formal interview, the purpose of the study was explained and all questions were answered about the study or the Minnesota Mainstream program. The mentors were informed that the study would not link a specific mentor to a specific consumer and the name of the person mentored need not be mentioned. All mentor interviews were recorded and took between 20 and 30 minutes. During the interview, notes were taken to supplement the recording. Mentors displayed a considerable amount of empathy for the consumers.

Staff Interviews

All interviews were tape-recorded and a summary of the responses was written by the principal investigator. These interviews were supplemented by printed materials used by Minnesota Mainstream. All interview materials were removed from the site.

Data Coding and Entry

Initial coding. Separate data bases were established for consumers and mentors using Visual dBASE (Borland, 1995). The Consumer Questionnaire and Rating and Ranking Supplement data were entered as specific codes. Consumer interview data were entered verbatim from the interview audio-tapes by another clerical staff. Initial codes were established based on prior experience, literature reviews, informal analysis of responses to the first 15 interviews, and formal classification systems. The following are the major items coded and the codes used:

Item\Variables	Initial Coding Method
Primary Disability	DSM-IV (Appendix D)
Psychotropic Medications	Classification of psychotropic medications by purpose—study derived (Appendix D)
College Major; Job Title	Classification for Instructional Purposes (2-digit CIP Codes) (Appendix D)

Educational Degree	Study derived (Appendix D)
Job Title and Code	<i>Dictionary of Occupational Titles</i> (DOT Codes)
Employer	Standard Industrial Classification (4 digit SIC Codes)
Parents' Employment History; Consumer's Employment History	5 Skill Levels - Study Derived.(Table 3-2)
General Assessment of Functioning (GAF) Scale	Rating of between 1 and 100 on overall level of functioning at time of consumer interview

Primary Disability was determined from the consumer's own diagnosis (Interview, Item 8a), description of symptoms (Interview, Item 8d), and knowledge of when the consumer was becoming dysfunctional (Interview, Item 8e) and compared to DSM-IV. Secondary Disabilities and Psychotropic Medications were obtained from the same interview section (Items 8b; 8c) and similarly coded.

Jobs and employment were coded by skill levels between 1 (unskilled) to 5 (skilled). After the most relevant *Dictionary of Occupational Titles* occupational definition (i.e., job) and code were assigned the each job, the skill level was determined from Occupation Groups Arrangement, Data-People-Things, General Educational Development, and Specific Vocational Preparation (Table 3-2) for that job. These four coding systems measure job complexity, which is very closely related to skill level (Miller, Treiman, Cain, & Roos, 1980). OGA, DPT, GED, and SVP codes were obtained for each job title using the OASYS software program (Vertek, 1995).

After each code was recorded, the principal investigator assigned a skill level determined by the codes on Table 3-2. For example, the occupational definition of *Teacher, Secondary School* included the following codes relevant to this study:

OGA - 091 (001 to 099 are professional and semi-professional jobs; 091 are occupations in education).

DPT - 227 (Data code 2 = Analyzing; People code 2 = Instructing; Things 7 = not relevant)

GED - 545 (Reasoning code 5 = Apply principals of logical or scientific thinking to solve problems. Mathematics code 4 = linear to exponential functions; plane and solid geometry. Language code 5 = read journals, legal documents.)

SVP - 7 (Two to four years of specific training needed.)

A skill level was independently assigned to each of these four coding systems. The skill level codes were compared, and if three or four coding systems yielded the same code that code was assigned as the skill level. If two or less codes were identical, the job description on the consumer's questionnaire was again reviewed by the principal investigator. A graduate assistant trained in job analyses independently reviewed each occupation (without being able to identify the consumer) and assigned a skill level. Jobs on which the assistant and the principal investigator differed were discussed and a shared decision was made.

Table 3-2. Skill Level Criteria for Occupations

Occupational Hierarchy of Skill Levels	Codes and Classification Criteria			Examples from Consumers' Employment Histories
	Occupational Definition Code (DOT Code)	General Educational Development Code (GED)	Specific Vocational Preparation Code (SVP)	
<i>Professional and Managerial</i> (code = 5)	OGA ¹ = 001. to 090. DPT: Data = 0 to 2. People = 0 to 3. Things = 1.	Reasoning = 6 and 5. Mathematics = 6 and 5. Language = 6.	SVP = 8 and 9.	Hospital Administrator Clergy Member Attorney President of Corporation
<i>Semi-Professional and Technical</i> (code = 4)	OGA = 001. to 090. DPT: Data = 0 to 2. People = 0 to 3, 5. Things = 0, 1.	Reasoning = 5 and 4. Mathematics = 5 and 4. Language = 6.	SVP = 7 and 8.	Nurse, General Duty Teacher Job Analyst Electronics Engineer
<i>Skilled</i> (code = 3)	OGA = 201. to 979. DPT: Data = 2, 3. People = 3, 6 to 8. Things = 0 to 2.	Reasoning = 4. Mathematics = 4 and 3. Language = 4 and 3.	SVP = 5 to 7.	Carpenter Police Officer Bookkeeper Leasing Agent, Rental
<i>Semi-skilled</i> (code = 2)	OGA = 201. to 979. DPT: Data = 5 and 6. People = 6 to 8. Things = 3 to 5.	Reasoning = 2. Mathematics = 2. Language = 2.	SVP = 3 and 4.	School Bus Driver Telephone Solicitor Stock Clerk Cashier-Checker
<i>Unskilled</i> (code = 1)	OGA = 201. to 979. DPT: Data = 6. People = 6 to 8. Things = 6 and 7.	Reasoning = 1. Mathematics = 1. Language = 1.	SVP = 1 and 2.	Electroplating Laborer Kitchen Helper Cleaner, Commercial Usher

¹OGA = Occupational Groups Arrangement (the first three numbers of the nine-digit DOT code).

The final code assigned to each consumer was a rating of between 1 and 100 on the Global Assessment of Functioning (GAF) Scale (American Psychiatric Association, 1994). As implied by its name, this single scale estimates a person's overall level of functioning. The GAF scale was assigned by a research associate who had completed all requirements for a doctorate in clinical psychology, except an internship. A form linking the GAF criteria to various data fields contained in the consumer's interview, rating supplement, and interview was developed. In assigning a GAF, the following factors were considered: Employment (quality of employment history, present employment); Social (community involvement, friends, family, social skills); and Symptomatology (family history, present symptoms, present life satisfaction). Rating reliability was determined by a second clinical psychology doctoral student rating a random sample of 25 of the 48 consumers using the same technique. The resulting correlation between the two sets of ratings was $r = .862$ ($df = 23$; $p = .000$).

Data entry. All data for the 48 consumers were entered using Visual dBASE. In order to maintain accuracy, the principal investigator reviewed every fourth case. Data from the Questionnaire and Rating and Ranking Supplement were then transformed into an SPSS file format in March, 1997. All subsequent quantitative data analysis was performed using SPSS. Data for the mentor interviews were entered in May, 1997, by the same person who entered the consumer data.

Recoding to combine categories. Frequency distributions were prepared for all variables, and these were examined to determine if recoding was needed. Initial coding developed a large number of alternative responses for some variables. Upon examining the frequency distributions, several items were recoded or reclassified to reduce the number of response alternative. The small sample size of 48 consumers made this necessary.

Quantitative Data Analysis

Most statistical analysis was guided by the two general purposes of the study and the seven specific research questions. Considerable data modifications were required before most of the data could be analyzed:

1. **Dates and age.** Data analysis depended upon the point in the consumer's life at which certain events occurred. All dates were changed as determined by the age of the consumer at which various events occurred.
2. **Reordering education and occupations.** The consumer questionnaire allowed for six educational and six employment entries. Consumers were asked to begin with their present or most recent educational institution and job and then to move backwards to earliest education or employment. This arrangement created serious problems. The reverse sequencing made calculation of dates and ages very difficult. Some consumers did not have their employment and educational histories in any sequence. Several consumers were employed in more than one job at the same time. Other consumers were not certain on the start or ending date of a particular school attended or a job held. These problems were solved by "rearranging" both educational and employment data into a sequence by which the first school attended and the first job held were coded as school or job "one." All schools and jobs were arranged in ascending order as determined by

the age of the consumer at the time of the activity. It must be emphasized that all educational and employment histories in this report are based on the consumer's ability to recall and record the last six schools or jobs held.

3. **Distribution extremes.** Many variables related to estimated weekly income, hours worked, and hourly wage had high values and/or extremes. Each distribution was examined and the outliers were removed through a process of recoding outliers as the next highest or lowest value in the distribution. For example, a frequency distribution of hourly wage included values from \$1.50 per hour in supported employment to \$90 per hour for an insurance executive. At the lower end, the next highest hourly wage was \$4.50; therefore, the \$1.50 was recoded as "4.50." At the upper extreme, the next lowest value from \$90 was \$30; the 90.00 was recoded as "30.00." Because it retained all observations in each distribution, no consumer data were removed. In comparing several distributions with and without recoding of outliers, it was observed that the means commonly changed by less than two percent. Standard deviations, of course, were somewhat reduced in value.
4. **Outcomes.** We needed to develop a simple, objective outcome measure. After a considerable review of the 48 consumers, it was decided to base outcomes only on paid employment after receiving Minnesota Mainstream services. Based on several statistical analyses involving the consumer's age at the time of employment in various occupations and age of entry and exit from Minnesota Mainstream, four separate outcomes were determined (See Figure 1).
 - a. **Never Worked Group.** No paid employment before or after Minnesota Mainstream services.
 - b. **Prior Work History Group.** Paid employment prior to Minnesota Mainstream services but none after services.⁴
 - c. **New Employment Group.** Paid employment prior to entering Minnesota Mainstream program. No job upon entry into program or changed to a new job after program entry.
 - d. **Ongoing Employment Group.** Constant employment in the same job before, during, and (for at least a short time) after Minnesota Mainstream services.

⁴For all analyses groups a and b were combined into an "unemployed group."

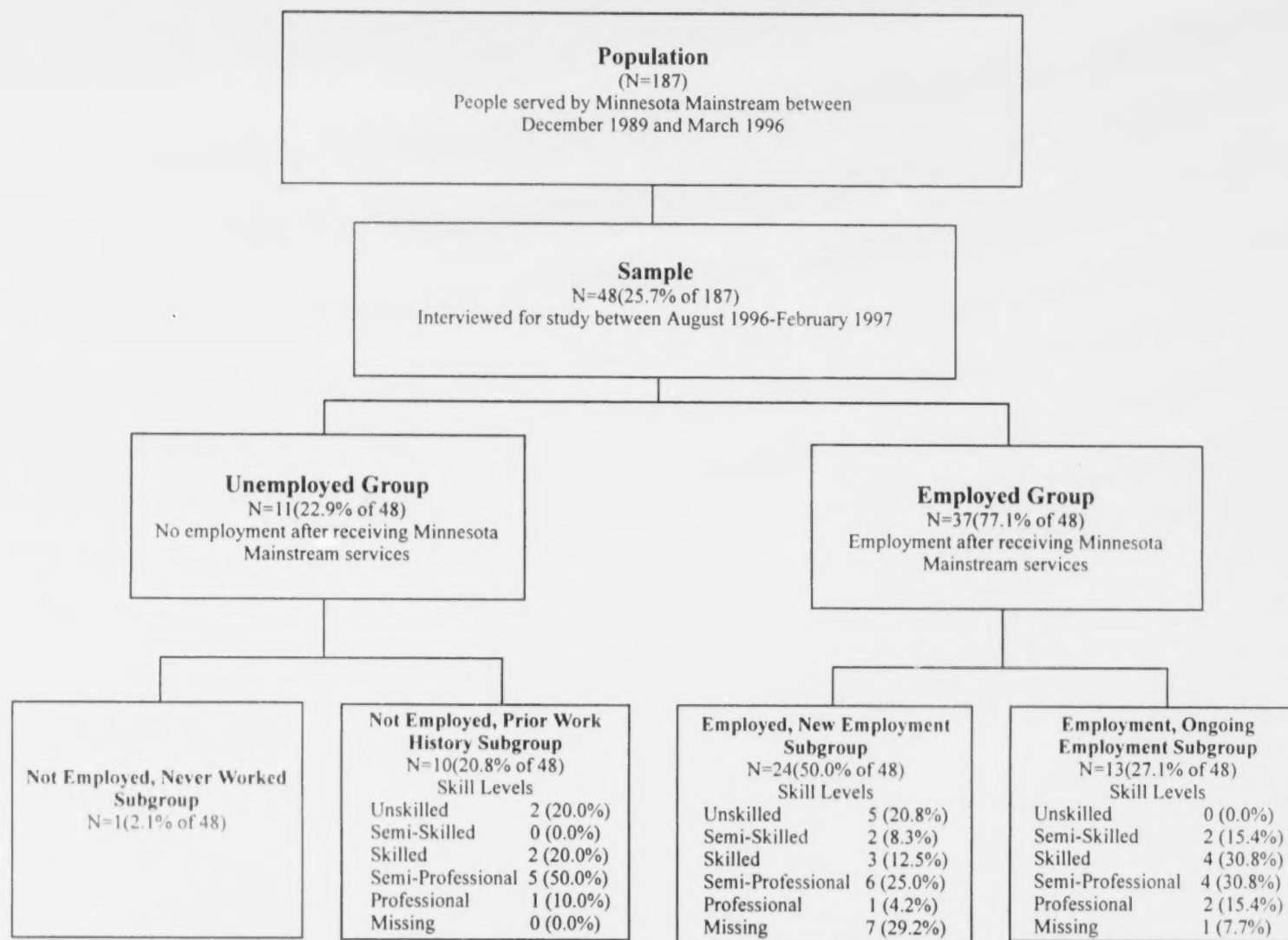


Figure 1. Summary of Number of Consumers in Study and Major Outcomes

Qualitative Data Analysis

The information contained in the consumer interviews provided the data for qualitative data analysis. Most of the qualitative data analysis consisted of summarizing and editing the consumer's specific responses to the questions asked during the interviews. Selected quotes were included and edited to illustrate and provide insight into corresponding quantitative data. Most commonly, comments were organized according to the consumer outcomes described immediately above. In selecting quotes for this analysis, the principal investigator chose quotes that best represented the common responses and common underlying themes relating to a specific question or topic. The most dramatic or most unusual were not typically chosen for inclusion.

This section has described the methods for obtaining, collecting, and analyzing the data for this study. These methods were followed to yield the results described in the next section.

Chapter IV

Results

Results are presented around the two research objectives (i.e., evaluate the effectiveness of the Minnedosa Mainstream program and describe the consumers in this program) and the specific research questions that follow these general objectives: (a) What is the Minnesota Mainstream program, (b) what are the demographic characteristics of the consumers in the Minnesota Mainstream program, (c) what are the vocational outcomes of the Mainstream program, (d) what were the consumers' present levels of functioning, (e) what was the higher education and employment histories of consumers in this program, (f) are objective career development patterns identifiable, and (g) what are the consumers' attitudes and values about employment and having a career?

We begin with a description of the Minnesota Mainstream program and supplement this description with interview results from consumers, staff, and mentors. We then follow with detailed answers to the seven research questions relative to outcome, predictions, strengths, and limitations of the programs and how these findings conform to the literature assumptions about the provision of differentiated services for high functioning persons with major psychiatric disabilities.

The Minnesota Mainstream Program

This general section describes the Minnesota Mainstream program, the characteristics of the consumers, the vocational outcomes of the program, and consumers' present levels of functioning. Between December, 1989, and March, 1996, (the period covered in this study) Mainstream had contact with over 215 persons, 187 of which received significant services. During this time period between two and three direct service staff provided services described below.

At the time of this writing (November, 1998), the program has a capacity for 35 consumers and a direct service staff of 2.5 FTE. Active case loads range between 13 and 17. Direct management is provided by a full-time manager, who spends about 30 percent of his time supervising the Mainstream program. In keeping with the philosophy of a consumer-run program, all direct services staff involved in the program have histories of mental illness. However, these staff also have the academic and professional qualifications required for mental health counselor certification. The program can best be described as vocational counseling and related services by professionally qualified staff.

Program Description

The concept for Minnesota Mainstream originated with a person with a psychiatric disability and Ph.D. in physics who was seeking employment in his field.¹ He had been in several placement programs and had found employment only in unskilled and supported employment. His idea was to develop a consumer-staffed program providing an array of employment services for persons with

¹Much of the information presented here was taken directly from Rise, Inc. (1992).

higher education and severe psychiatric disabilities to enable them to develop and achieve long-term plans resulting in return to their chosen career fields. These concepts have remained at the core of Mainstream since its beginning.

The idea resulted in a federal grant from the Rehabilitation Services Administration, U.S. Department of Education that was in effect from October 1, 1989, to September 30, 1992. Since 1992, the program has been funded by fees for services and supplementary grants. The overall goal of the program since its beginning is to return consumers to work or help consumers retain their present jobs at a professional or semi-professional level. Because of reduced energy and/or the need to maintain subsidized benefits, many persons in the Mainstream program return to work first on a part-time basis and then gradually increase their hours to full-time. Consumers may become employed but still need help with coping skills to interact with persons unable or unwilling to accept and support their disabilities.

While the program is linear in terms of consumers' entering, receiving a variety of services, and leaving, Mainstream has an open-entry/open-exit policy. Persons can re-enter the program for additional services if they can arrange for the Division of Rehabilitation Services (DRS) to fund them a second time. Over the life of the program, several persons have left the program and then returned for additional job placement and job-keeping services.

Minnesota Mainstream was designed as a person-centered program that delivers a flexible array of services to persons with mental illness who are seeking professional employment positions. By design, the program has no set structure with consumers developing an individualized plan based on their career needs. One objective is to assist consumers to enter or return to the occupational speciality in which they were trained. If this is not feasible, a closely related occupational area is investigated. While consumers can change professional fields and many choose to update their skills, most do not engage in long-term training or re-education for a new career field. The services described in the following paragraphs were available to consumers between late 1989 and March of 1996 and applied during the period in which the study was conducted.

Consumer education and outreach. Initially, printed materials were developed to inform consumers, family members, mental health professionals, and Division of Rehabilitation Services staff about the existence of the program. In addition, an article in a Twin Cities newspaper brought hundreds of self-referrals. Staff coordinated all referral activities with educational, mental health, and DRS staff to assure that eligibility criteria were met. Interviews were arranged with staff to discuss services. If the consumer was interested and if there was an opening in the program, Mainstream staff contacted DRS, county mental health, and others to obtain information and to secure funding. As of October, 1998, all consumers in the program were funded by the Division of Rehabilitation Services. Until recently, the program had a waiting period of over a year.

Career planning services. This service is provided in both individual and group counseling sessions and is one of the most intensive services offered by the program.² An individualized written career development plan is written, which includes the person's goals and the specific steps involved

²Much of the process described was published by Rise, Inc., staff in a book titled *Working on the Dream* (Lavin & Everett, 1996).

to reach these goals. Although largely developed by the consumer and Mainstream counselors, DRS counselors, mental health staff, and family members are often involved. In general, career planning services have four outcomes: (a) identify employment outcomes that are important to the individual; (b) prepare job development and support plans that are essential to locating and keeping a position of his/her choosing; (c) plan for reasonable accommodations, and (d) coordinate related plans, such as housing and transportation.

Although any number and types of specific services are provided, a typical career plan includes several of the following:

1. Individual job preferences and dislikes;
2. Previously acquired job skills and competencies;
3. Specific employment outcomes to be obtained from job placement, such as wages, job duties desired, developing additional skills, self-esteem, contribution to career path, and interpersonal relationships;
4. An assessment of the employability factors critical to personal employment success, understanding of symptoms and symptom management, interpersonal skills, medication management, and independent living considerations;
5. Barriers specific to the consumer that may interfere with obtaining and retaining employment;
6. Identification of time-limited and ongoing agency support services needed for job success;
7. Employer and/or natural supports needed during and after working hours;
8. Additional limited education or specific job training needed to obtain career goals; and
9. Active coordination with Community Support Program (CSP) and other psychiatric services required to maintain successful independent living in the community.

During this time a career plan for the individual is developed and is subsequently used by the counselor to develop a job of his/her choosing. This plan guides all other program activities. The major activities are described below:

Developing PASS and IRWE plans. At program entry many Mainstream consumers were receiving Social Security Disability Insurance, which is commonly considered a negative incentive to competitive employment. One option to the possible sudden loss of SSDI benefits is to develop a PASS (Plan to Achieve Self-Support). A second Social Security Administration program, Impairment Related Work Expenses (IRWE), allows employment expenses directly related to the disability to be deducted from earned income that counts toward the individual's eligibility for cash benefits. When job development is being planned, consumers on SSDI will commonly prepare a

PASS and/or IRWE plan(s). The preparation of these plans is coordinated by Mainstream counselors with assistance by Social Security staff.

Job development services. After career planning, Minnesota Mainstream provides individualized job development services. Counselors work closely with each consumer to support obtaining his/her job of choice. Two general approaches are used: First, in the employer-centered approach, staff contact businesses on behalf of the consumer. Second, in the employee-centered approach, consumers make all contacts and represent themselves. Most consumers in the study obtained their jobs without Mainstream staff contacting employers. Consumers choose this option so they will not be immediately identified as a person with a psychiatric disability. These services are individualized and include the following options:

1. Job-seeking skills training;
2. Resume and cover letter development;
3. Employment counseling;
4. Professional networking for job leads;
5. Employer job development services;
6. Job and compatibility analyses;
7. Negotiating essential job accommodations;
8. Assisting consumers to develop natural supports;
9. Job training and on-site and off-site instruction;
10. Independent living services;
11. Coordination of services and providing information to other agencies serving the consumer;
12. Personal counseling; and
13. Providing ongoing support services.

Role of mentors. The recruitment and use of mentors is considered to be one of the most unique aspects and strengths of Minnesota Mainstream. The purpose is to link consumers with well-placed, high status mentors in the same professional speciality or sub-speciality as the consumer. The mentoring phase of the program was established in the belief that mentors (a) help boost the self-confidence of consumers by offering encouragement, understanding, and acceptance; (b) assist in examining the consumer's marketable skills in particular fields; and (c) offer more accurate information about specific business and professional trends and suggest contacts that might lead to job interviews.

The overall goal is to find persons who are trusted advisors, tutors, and career coaches. The association between mentors and consumers is professional; it is not a personal or a social relationship. Support and feedback are respectful and honest, like a supervisor with a student intern. While the mentor is not expected to find the consumer a job, the mentor offers quality advice on career ladders and employers to avoid. Mentors share information on employment, know current professional trends, and offer a support network. The Mainstream program uses mentors to provide technical and professional knowledge lacked by Mainstream staff and to obtain current "inside" information about a profession.

In recruiting mentors, Mainstream staff obtain names from persons active in professional organizations and involved in the community. Potential mentors are contacted directly by program staff and asked to participate. While they do not receive formal training, mentors are visited by Mainstream staff who explain the purpose of the program, what is expected, and what the limits are for both consumer and mentor. During the early years, the program used a "job description" designed for mentors and had them sign a contract. This practice was dropped several years ago and was replaced by a less formal process.

Self-employment. One sign of the program's flexibility is the occasional use of self-employment. Mainstream staff and consumers develop small-business plans that are often joined with PASS plans. In addition to technical expertise, staff give support services.

Ongoing support needs. The Minnesota Mainstream program provides support to two groups of consumers. The first group is consumers who are employed in jobs prior to entering the program and are employed at different jobs after leaving the program. The second is persons who were employed when entering Mainstream but were in danger of losing their current jobs. Mainstream provides a variety of ongoing-support needs. During the course of the program, there are times when support groups meet evenings to accommodate persons who work during regular business hours.

While the specific combination of support needs depends on the consumer, the following support services were available to both types of employed consumers: (a) individual counseling, (b) self-help support groups, (c) peer-mentor meetings, (d) consultations with employers concerning job accommodation, (e) career and job coaching, (f) job training, (g) transportation assistance, (h) medications monitoring, (i) case management coordination, (j) advocacy, and (k) independent living services. Within this array of services, individual counseling and self-help support groups were the most common ongoing supports provided.

Program Assessment by Consumers and Mentors

During the interview, consumers reported their impressions about the program and services they had received. They were also asked about career changes that may have resulted from program participation. Mentors were interviewed about their perceptions of the program.

Consumer Evaluation of Services

Each consumer was asked if he/she received a particular service and if so, to rank its usefulness compared to other services (Table 4-1). The three most common services received were individual counseling (91.7%), group counseling (77.1%), and occupational exploration (70.8%). In spite of the program's emphasis on mentoring and the considerable publicity about this aspect of the program, only 50 percent of the consumers had mentors. Consumers considered individual counseling to be the most useful service with group counseling second.

Table 4-1. Rank Order of the Usefulness of Services Received From Minnesota Mainstream

Rank of Minnesota Mainstream Useful Services	Consumers Receiving Each Service		Mean Ranking	
	Number	Percent	Mean	Standard Deviation
Individual counseling	44	91.7	1.68	1.01
Group counseling	37	77.1	2.78	1.20
Mentor program	24	50.0	2.83	1.79
Occupational exploration	34	70.8	2.85	1.16
Resume writing class	30	62.5	3.27	1.11
Other services	5	10.4	4.00	1.73

Note: Mean ranking in order of usefulness: 1 = most helpful service.

In addition to ranking services, consumers rated the overall effectiveness of the program and of the mentoring program in particular (Table 4-2). These two mean ratings were almost identical. While the mean rating for both was between "4 mixed" and "5 Mostly Satisfied," the standard deviation for the mentoring program was considerably larger. This indicated that consumers shared a variety of opinions of the usefulness of the mentoring program.

Table 4-2. Rating of Satisfaction with Mentor and General Satisfaction with Program

Satisfaction Items	Descriptive Statistics		
	Number	Mean	Standard Deviation
Satisfaction with mentor	23	4.78	2.21
General satisfaction with program	46	4.76	1.65

Note: Ratings on scale of 1-7; 1 = low; 7 = high.

Consumer Perspective on Program and Mentors

Useful services. Consumers were asked which services they believed to be most useful and not useful. The 48 consumers identified 83 specific helpful services; the five most common helpful services were individual counseling (28.9%), group counseling (15.7%), resume and interview preparation (14.5%), job support groups (12.0%) and job leads and development (12.0%):

- "...job support groups, individual counselors, help with resumes and job leads and other support needs."
- "Attended weekly meetings religiously - the job support group. I had an individual counselor and she gave me good advice..."
- "Job search groups, one-on-one job search strategy and assistance with resumes and cover letters, selection of occupations, job search and job keeping skills."

Not useful services. Consumers provided information on the services they disliked or were not satisfied with. Only 18 of the 48 consumers responded to this question, indicating that most services were satisfactory. The two most commonly disliked services were mentors (22.2%) and group counseling (16.7%). The comments on the mentoring program were mixed and centered on two areas. First, several consumers wanted a mentor, but were not connected with one:

- "I always wanted to have a mentor, but it just never materialized. I can't say there was any fault in that area...."

Second, for those consumers with a mentor, the results were very mixed:

- "Saw a mentor for about a year - a good match. We met for about an hour at a time and maybe met for a dozen occasions. He talked a little bit about the different types of career options that are open with an M.D. and a Ph.D. in [my speciality area]...."
- "Had a mentor. Did virtually nothing except frustrate and confuse me and annoy me. He was not at all helpful. I probably had three meetings with him and maybe five or six phone conversations."
- "We found a mentor but he was too busy for us."
- "The mentor that was chosen had been a teacher of mine.... Basically I liked her as a person, but she really pushed me into looking at rehab agencies in spite of the fact that I wanted nothing to do with it. The other part was, up until 1987, I was pretty much a leader in my field doing workshops and publishing and doing research and liking my jobs...."

The final consumer question in this section asked ideas for improving the Minnesota Mainstream program. Twelve of the 48 consumers had no suggestions or recommendations. The remaining 36 consumers offered a variety of suggestions, ranging from staff behavior to organizational change. Eight of the 36 (22.2%) consumers' suggestions centered on personality conflicts with staff and feelings that staff were too controlling and did not respect personal boundaries:

- "I would say having more than one person to work with because one counselor is sort of

an absolute and I didn't always agree with her...."

- "One thing I would do is probably be less directive in giving direct advice. Two questions I find really helpful when I'm dealing with clients are What have you done about the problem and What are you thinking about doing?"

Another eight suggestions centered on the operation of the program and where it was located. Several persons wanted to move Mainstream from Rise, Inc., to another setting that would be similar to a business. Consumers also wanted to see stronger ties with business and link the program to professional employment agencies (e.g., "headhunters"). Others wanted to spend more time in counseling.

- "Perhaps stronger ties with the actual job market...."
- "I really feel they should have a lot more contacts with business. Better judgment in selecting job leads...."

Consumer summary. Tables 4-1 and 4-2 and the interview comments indicated that consumers generally saw this program as providing a variety of helpful services. An underlying theme running through the ratings and consumer comments was the relationship between Mainstream staff and consumers. Consumers stated that they benefitted from individual counseling the most, and many comments about most helpful services dealt with specific counselors. The inverse of this rather intense relationship was that consumers raised issues of staff and consumer boundaries and personality conflicts. The second theme dealt with mentors. Although one of the Mainstream services is providing mentors, only half the sample had a mentor (Table 4-1). Many consumers entered the program expecting a mentor and others with a mentor were disappointed in the experience. Of those with a mentor, many were disappointed by the type and quality of assistance they received. While the mentor and some consumer interviews indicated the potential value of the mentoring process, it is estimated that only a quarter of the 48 consumers in this study had a positive relationship with mentors. The remainder experienced various degrees of disappointment.

Mentor Perspective on Program

The six mentors interviewed became involved with Mainstream as the result of a direct contact from Mainstream staff. None of the mentors had been selected because of experience with or even a particular interest in psychiatric disability. Mentors were motivated for a variety of reasons. One mentor had an employment need that led to job development for a consumer with schizophrenia. Others believed in mentoring as a way of helping persons. Motivation was a combination of interest in helping persons in general and in helping a person in the same profession:

"...a major part of my job here is being an example to the staff and modeling professional behavior. Also helping people on staff develop their career. It seemed like a natural thing for me to do for somebody else"

The mentoring program involved a three-way communication among consumer, Mainstream counselor, and mentor. Some mentors met with Mainstream staff prior to their introduction to the consumer and described ongoing contacts with program staff. Suggestions for improving the mentoring program were solicited with mentors believing they needed information about the

consumer's vocational and mental health histories in order to understand the consumer. The process differed with each mentor and consumer. One relationship was that of employer-employee. The remaining five mentors talked about getting to know the consumers and their vocational goals, meeting with them and encouraging the consumers to continue job search and development.

Demographic Characteristics of Consumers

Table 4-3 reports comparisons between the interviewed ($n = 48$) and not interviewed ($n = 139$) on demographic variables. No significant differences were found between the interviewed and not interviewed consumers on gender, race, pre-post higher education onset of disability primary, primary disability, age in years at Mainstream program entry, and age in years at Mainstream program exit. Therefore, results for the 48 consumers can be generalized to the entire Mainstream population. Both interviewed and not-interviewed were about 60 percent male and almost totally white. In both groups about two-thirds of the consumers had an affective or mood disorder as their primary mental health disability. Schizophrenia and schizo-affective disorders were reported by about another 25 percent of the interviewed and not interviewed groups. Consumers entered and exited the Mainstream while in their younger 40s. Although marital status could not be determined for the non-interviewed group, marital status for the interviewed group ($n = 48$) was obtained from the Consumer Questionnaire: single (41.7%), married (27.1%), divorced (25.0%), and living with partner (6.3%).

Table 4-4 presents disability related variables for the interviewed group. The median age of onset was 20.82 (mean = 23.64); the large standard deviation indicated that consumers varied considerably in onset age. Partially related to the age of onset was the age at which the consumers first saw a mental health professional. As with age of onset, the range was considerable. Present overall level of functioning was determined by the Global Assessment of Functioning (GAF) scale. GAF scale scores range between 1 and 100. The scale scores for the sample ranged between 21 to 65, with a mean and median at 50.39 and 51.00, respectively. A GAF score between 50 and 61 is described as follows:

Moderate symptoms. (e.g., flat affect and circumstantial speech, occasional panic attacks) or any serious impairment in social, occupational, or school functioning (e.g., few friends, unable to keep a job). (American Psychiatric Association, 1994, p. 32)

Table 4-4 also presents the secondary disabilities; 37 of the 48 consumers reported at least one secondary disability; a total of 61 disabilities were reported. The most common secondary or co-existing disabilities were another psychiatric disability, orthopedic (e.g., lower back, knee, shoulders), and chemical dependency. Based on the taped interviews and comments from consumers after the interviews, chemical dependency was most likely under-reported. Thirty-three of the consumers were taking a total of 61 psychotropic medications. The most common medications (44.3%) were antidepressants (e.g., paxil, prozac) to control mood disorders. The second most common group of medications (19.7%) were neuroleptics (e.g., clozaril, thorazine) used to treat the symptoms of schizophrenia, bi-polar disorders, and anxiety.

**Table 4-3. Comparison of Interviewed and Not Interviewed
Minnesota Mainstream Consumers on Demographic Characteristics**

Demographic Characteristic and Category	Frequency and Percent						Analysis		
	Interviewed		Not Interviewed		Totals		Chi Square	Degrees of Freedo m	p-level
	f	%	f	%	f	%			
Gender									
Male	29	60.4	78	57.4	107	58.2	0.14	1	.711
Female	19	39.6	58	42.6	77	41.8			
Total	48	26.1	136	73.9	184	100.0			
Race									
White	47	97.9	130	97.0	177	97.2	0.09	1	.758
Black	1	2.1	4	3.0	5	2.8			
Total	48	26.4	134	73.6	182	100.0			
Onset of Disability									
Before higher ed.	30	63.8	44	35.8	74	43.5	0.67	1	.413
After higher ed.	17	36.2	79	64.2	96	56.5			
Total	47	27.6	123	73.6	170	100.0			
Primary Disability									
Schizophrenia and related	12	25.0	28	20.6	40	21.7	3.25	3	.354
Affective disorder	31	65.6	93	68.4	124	67.4			
Anxiety disorder	4	8.3	10	7.4	14	7.6			
Personality disorder	1	2.1	5	3.7	6	3.3			
Total	48	26.0	136	73.9	184	100.0			

Age in Years for Program Entry and Exit	Descriptive Statistics for Each Interview Group					Analysis		
	Interviewed		Not Interviewed		Totals	t Test	Degrees of Freedo m	p-level
Age in years at time of program entry								
Number	48		130		178	0.74	176	.461
Mean	41.68		41.24		41.36			
Standard deviation	7.60		8.40		8.18			
Age in years at time of program exit								
Number	48		131		179	0.96	177	.339
Mean	43.18		42.26		42.62			
Standard deviation	7.48		8.46		8.20			

**Table 4-4. Disability Related Characteristics for Interviewed
Minnesota Mainstream Consumers**

Disability Variables	Number of Cases	Mean	Median	Standard Deviation
Age of onset ^①	43	23.64	20.82	11.99
Age first saw mental health professional	47	24.71	21.16	8.35
Present Global Assessment of Functioning Scale (GAF)	48	50.40	51.00	10.73
Frequency and Percent for Characteristics and Categories				
Disability Variable	Frequency	Percent		
Secondary Disabilities ^②				
Mood disorder	14	22.9		
Psychiatric, could not be classified	10	16.4		
Orthopedic	7	11.5		
Chemical dependency	6	9.8		
Internal, other & not classified	6	9.8		
Personality disorder	4	6.6		
Sensory	4	6.6		
Cardiovascular	3	4.9		
Arthritis	2	3.3		
Digestive	2	3.3		
Schizophrenia and related	1	1.6		
Respiratory	1	1.6		
Cancer	1	1.6		
Total	61	99.9		
Present Medications ^③				
Antidepressants	27	44.3		
Neuroleptics	12	19.7		
Anti-anxiety	7	11.5		
Anticonvulsants	7	11.5		
Bipolar medications	4	6.5		
Could not be classified	4	6.5		
Total	61	100.0		

① Three outliers removed.

② 37 of the 48 consumers reported at least 1 secondary disability; the 48 consumers had a total of 61 secondary disabilities.

③ 33 of the 48 consumers were taking at least 1 psychotropic medication; the 48 consumers had a total of 61 psychotropic medications.

Eighty-five percent of the consumers came from homes in which the father was employed in a skilled, semi-professional, or professional occupation. In 52.1 percent of the cases, the mother was a homemaker. Mothers who did work were mostly employed in skilled occupations (e.g., bookkeeper, secretary) or in semi-professional occupations (e.g., nurse, social worker, teacher). Finally, we asked about family disabilities. Thirty-eight of the 48 consumers reported at least one member with a disability, for a total of 86 disabilities. If chemical dependency is considered a psychiatric disability, then over 55 percent of the consumers had family histories of one or more

psychiatric disabilities. The most common disability among consumer family members was mood disorder; other common disorders were cardiovascular and chemical dependency. Family reported mental illness rates were considerably higher than in the general population.³

In summary, the typical Minnesota Mainstream consumer was a white male with an affective disorder. He was over 40 and had worked in his career field over ten years prior to entering the Mainstream program. As measured by father's level of employment, the typical consumer was middle-class. There was significant family history of mental illness and/or substance abuse. Based on the lack of significant differences reported in Table 4-3, the 48 interviewed are a representative sample of the Mainstream consumers.

Minnesota Mainstream Program Outcomes

Because Minnesota Mainstream is a vocational program to return persons to work and/or to keep persons employed, the only positive outcome was competitive employment. Volunteer work, returning to school, and other productive (though non-employment) activities were not considered viable outcomes.⁴

Four Types of Outcomes

Outcomes were determined based upon the person's first paid job after the entry date into Minnesota Mainstream program. In order to be considered "employment" the consumer had to be earning a wage and be employed over eight hours per week. Using these criteria, four separate outcome groups were found (Figure 1):

Not Employed, Never Worked Subgroup. One consumer had no employment prior to program entry and none after.

Not Employed, Prior Work History Subgroup. These 10 persons were employed before program entry. They did not return to paid employment after receiving Mainstream services for the following reasons: mental health symptoms, unable to find employment, and lack of career goals.

Employed, New Employment Subgroup. These 24 persons were employed prior to Mainstream, entered the Mainstream program either as unemployed or underemployed (i.e., unskilled and semi-skilled jobs), and found new jobs after entering the program.

Employed, Ongoing Employment Subgroup. The 13 persons in this group had constant employment before, during, and after their participation in the program. In this group Mainstream services focused on job-keeping skills. While some of these persons changed

³Incidence rates for schizophrenia are 1 per 10,000 per year. At least a single episode of a major depressive disorder occurs in 2-9 % for women and 2-3% for men. Both disabilities are far more common among persons with close relatives having the same diagnosis (American Psychiatric Association, 1994)

⁴Four persons in the two Not Employed subgroups were engaged in productive activities.

jobs after receiving Mainstream services, they were continuously employed during most of their participation in Mainstream.

The following section concentrates on the outcomes achieved by Prior Work History Subgroup, New Employment Subgroup, and Ongoing Employment Subgroup.

Not Employed, Prior Work History Subgroup

Table 4-5 contains descriptive statistics for the last job held for the Not Employed, Prior Work History Subgroup, where the "last job held" is the last paid employment regardless of the dates held. Some consumers were only unemployed for a short time before entering Mainstream; others had not worked for several years. As indicated by the estimated income range and standard deviation, employment varied from low-paying part-time work to full-time professional work. Consumers in this group were employed in this last job for an average of 3.37 years, ranging between a few months to over ten years. The typical skill level was semi-professional and consumers were content with their jobs. Some of the last jobs for the unemployed subgroup were elementary school teacher, graphic designer, administrator of a non-profit organization, and director of religious education. The typical job held by persons in this subgroup could be characterized as being stable, semi-professional, and paying a competitive wage.

Table 4-5. Not Employed, Prior Work History Subgroup (n = 10): Characteristics of Last Job Held Prior to Minnesota Mainstream Entry

Employment Characteristic	Descriptive Statistics				
Continuous Variables	Number	Mean	Median	Range	Standard Deviation
Weekly income	7	154.00	140.00	49-232.5	75.23
Hourly wage	7	6.73	7.00	5-9.89	1.76
Hours worked weekly	10	37.60	35.00	12 - 70	20.50
Years on job	10	3.37	2.42	.25 - 10.25	3.81
Job Skill Level	Frequency	Percent	Job Satisfaction Rating	Frequency	Percent
1 Unskilled	2	20.0	1 Terrible	0	0.0
2 Semi-skilled	0	0.0	2 Unhappy	1	10.0
3 Skilled	2	20.0	3 Mostly dissatisfied	0	0.0
4 Semi-professional	5	50.0	4 Mixed	3	30.0
5 Professional	1	10.0	5 Mostly satisfied	4	40.0
Total	10	100.0	6 Pleased	1	10.0
			7 Delighted	1	10.0
			Total	10	100.0

Employed, New Employment Subgroup

Half of the 48 consumers in the study were in the New Employment Subgroup (Table 4-6). Persons in this group were employed prior to entering the Mainstream program and were employed in a different job after program entrance. Table 4-6 compares this group at three points: Before entering the program, on the date of program entry, and on the first paid employment after Mainstream entry. Weekly income, hourly wage, and hours worked weekly initially declined upon program entry and was followed by increases between program entry and the first job after Mainstream services. The decline in income followed by increased income after Mainstream services was statistically significant ($F = 4.07$, $df = 2,22$, $p = .031$). Changes in skill level and job satisfaction were determined by calculating the number of changes (i.e., increase, no change, decrease) between the before-upon entry and upon-entry to first job after. Skill levels and job satisfaction declined prior to entry and increased subsequent to their participation in the program. There were significant differences between skill level and job satisfaction changes.

Each variable on Table 4-6 suggests the same pattern: loss from before program entry to program entry, followed by an increase between program entry and first job after program entry. The number of persons employed also followed this pattern. Therefore, Table 4-6 suggests two patterns: First, there is a decrease in the number of persons working and then an increase in the number of employed. Second, for those who were employed, there is a decline on all variables measuring this employment followed by an increase on these variables.

Upon program entry many persons in this group were marginally employed in part-time, low-skill occupations (e.g., sales clerk, janitor, data entry clerk, security guard, and small parts assembler). Others were employed in their professions or closely related jobs (e.g., physician, teacher, engineer, editor, lawyer). A few persons were marginally employed professionals, working part-time for less-than-competitive wages. For example, an accountant was employed as a bookkeeper with a non-profit organization.

Employed, Ongoing Employment Subgroup

The ongoing employment subgroup maintained the same jobs prior to program entry, during program entry, and for at least several months after program entry. While involved in Mainstream, this group was mostly involved in job keeping programs. As a result of ongoing services, some consumers in this group increased their hours worked and hourly wage between leaving the Mainstream program and their interview. The descriptive statistics for this subgroup are on Table 4-7. Persons worked at the skilled and semi-professional levels and were mostly satisfied with their jobs. Their median hourly wage was \$15.00, they were employed about 30 hours per week, and, during interviews, indicated that they were underemployed. A social worker, for example, was employed for 30 hours per week as an independent contractor with no fringe benefits and little chance of upward mobility. An attorney and CPA with a history in large business bankruptcy was self-employed with a small practice in personal bankruptcy.

Table 4-6. Employed, New Employment Subgroup (n = 24): Comparison of Employment Variables Before, Upon, and After Program Entry

Employment Characteristic	Descriptive Statistics					
	Persons Employed		Mean	Median	Range	Standard Deviation
	Number of Responses	Percent of Subgroup				
Weekly Income						
Before entry	21	87.5	301.88	288.00	49.42-684	195.50
Upon entry	12	50.0	169.75	143.00	35-628.05	106.84
First job after	21	87.5	286.49	252.00	75-720	175.22
Repeated Measures ANOVA: F = 4.07 p = .031 Degrees of Freedom: Between = 2; Residual = 22 (12 cases).						
Hourly Wage						
Before entry	21	87.5	8.74	9.00	4.25-13.69	3.20
Upon entry	12	50.0	6.59	6.00	2.08-10.58	2.33
First job after	22	91.7	8.99	6.99	5.00-25.00	5.21
Repeated Measures ANOVA: F = 2.10 p = .146 Degrees of Freedom: Between = 2; Residual = 22 (12 cases)						
Hours Worked Weekly						
Before entry	22	91.7	31.00	40.00	7-50	12.99
Upon entry	13	54.2	25.23	20.00	7-50	13.86
First job after	23	95.8	31.48	40.00	15-45	10.77
Repeated Measures ANOVA: F = 2.75 p = .083 Degrees of Freedom: Between = 2; Residual = 24 (13 cases).						
Variable and Category	Changes: Before-Upon Program Entry		Changes: Upon Program Entry-First Job After Entry		Total Changes	
	Number	Percent	Number	Percent	Number	Percent
Skill Level						
Increased level	0	00.0	9	64.3	9	31.03
No change in level	12	85.7	4	28.6	16	55.17
Decreased level	2	14.3	2	14.3	4	13.80
Total	14	100.0	15	100.1	29	100.00
X ² = 13.62 df = 2 p = .001						
Job Satisfaction						
Increased level	0	0.0	12	85.7	12	42.86
No change in level	10	71.4	1	7.1	11	39.29
Decreased level	4	28.6	1	7.1	5	12.86
Total	14	100.0	14	99.9	28	100.00
X ² = 21.16 df = 2 p = .001						

Table 4-7. Employed, Ongoing Employment Subgroup (n = 13): Characteristics of Job Held During Minnesota Mainstream Services

Employment Characteristic	Descriptive Statistics				
Continuous Variables	Number	Mean	Median	Range	Standard Deviation
Weekly income	13	391.23	360.00	78.75-769.00	279.76
Hourly wage	13	14.38	15.00	5.00-30.00	8.20
Hours worked weekly	13	28.69	30.00	12.00-50.00	13.39
Job Skill Level	Frequency	Percent	Job Satisfaction Rating	Frequency	Percent
1 Unskilled	0	0.0	1 Terrible	1	7.7
2 Semi-skilled	2	16.7	2 Unhappy	1	7.7
3 Skilled	4	33.3	3 Mostly dissatisfied	1	7.7
4 Semi-professional	4	33.3	4 Mixed	3	23.1
5 Professional	2	16.7	5 Mostly satisfied	3	23.1
Total	12	100.0	6 Pleased	4	30.8
			7 Delighted	0	0.0
			Total	13	100.0

Patterns of Employment Following Mainstream

As indicated above, the new employment and the ongoing employment subgroups held at least one job between program entry and the time of the research interview (Table 4-8). Employment ranged between a few months to over six years. This table presents data for the first four years of employment after Mainstream services. The decline in sample sizes over time is attributed to missing data and to interviewing a higher percentage of consumers who had recently completed the program. Weekly income, hourly wage, and hours worked per week were compared using repeated measures of analysis of variance. Chi squares were calculated for skill level and job satisfaction between the two adjoining time periods. There were no significant differences between any variable on Table 4-8. They worked mostly at semi-professional and skilled occupations and were mostly satisfied with their jobs. In reviewing Table 4-8, the major result is the consistency of the employment variables over the four years. Consumers were stable in all variables.

Accommodations and Support to Sustain Employment

Consumers in the two employed groups described the type of accommodation and support they received on each job after entry into the Mainstream program. The major finding was that for 82.6 percent of the jobs, consumers received no accommodation. Consumers frequently repeated in interviews that they did not want to be identified as a person with a psychiatric disability and were either afraid to ask for accommodations or believed that they could function without them. Flexible scheduling and reduced hours were the most common accommodations:

**Table 4-8. Employment Characteristics of Consumers
by Year Since Completion of Minnesota Mainstream Without Outliers**

Employment Characteristic by Years	Descriptive Statistics										
	Number Working		Mean		Median		Range		Standard Deviation		
Estimated Weekly Income											
1 Year after MM	27	342.75	320.00	80.00-750.00	216.70						
2 Years after MM	24	407.87	425.00	80.00-750.00	245.66						
3 Years after MM	18	410.62	426.60	80.00-750.00	282.73						
4 Years after MM	16	371.03	268.35	80.00-750.00	285.58						
Hourly Wage											
1 Year after MM	27	11.24	9.00	5.00-30.00	6.59						
2 Years after MM	25	13.38	10.00	5.00-30.00	7.11						
3 Years after MM	19	14.51	14.07	5.00-30.00	7.57						
4 Years after MM	16	13.36	12.30	5.00-30.00	7.95						
Hours Worked Weekly											
1 Year after MM	29	32.00	40.00	7.00-55.00	13.57						
2 Years after MM	26	32.38	40.00	7.00-55.00	13.78						
3 Years after MM	19	30.16	32.00	7.00-55.00	14.71						
4 Years after MM	17	28.71	25.00	7.00-55.00	15.76						

Employment Characteristic by Change	Changes between Years								Total Changes	
	Years 1 and 2		Years 2 and 3		Years 3 and 4					
	f	%	f	%	f	%	f	%	f	%
Skill Level										
Increased level	4	16.7	0	0.0	0	0.0	4	7.0		
No change in level	18	75.0	18	94.7	12	85.7	48	84.2		
Decreased level	2	8.3	1	5.3	2	14.3	5	8.8		
Total	24	100.0	19	100.0	14	100.0	57	100.0		
Job Satisfaction										
Increased level	3	12.5	2	10.5	2	14.3	7	12.3		
No change in level	17	70.8	16	84.2	12	85.7	45	78.9		
Decreased level	4	16.7	1	5.3	0	0.0	5	8.8		
Total	24	100.0	19	100.0	14	100.0	57	100.0		

- "Allowed to work 32 hours instead of [the] usual 40 hours per week."
- "Yes. I was free to reschedule work days around my disability, if necessary."
- "Yes, leave for two hospitalizations, part-time hours...."
- "I bargained for more breaks while performing labor."

In addition, two persons mentioned working at home for two days per week, a few others were permitted to take time from work to attend therapy: "...Time off for doctor visits, employer met with counselors, worked part-time; did not have to record hours."

Consumers reported that for 54 percent of jobs held during and after Mainstream, they received *no* support. In other words, employed consumers in over half the jobs reported that they were not supported emotionally by co-workers, supervisors, friends, family, and mental health professionals. There were two reasons for this: First, many consumers strongly believed that they could cope with employment without needing to ask for support. They wanted to "prove themselves" on the job. Second, fear of disclosure to co-workers and supervisors inhibited many from asking for support. The majority of the support was provided by Mainstream counselors or mental health counselors:

- "Initial support after hours from MM staff individually and group, then CSP support group, a few years later."
- "...help from MM counselor."
- "Staff from Minnesota Mainstream."

The other major sources of support came from supervisors: "Closer supervision ..., peer counseling," "Management tried to help," and "First supervisor was especially understanding and OK when I needed to cry." In summary, the consumers employed after Mainstream entrance received limited accommodations, and some type of support was provided on about half the jobs.

Outcomes and Predictors

As indicated in the Literature Review, there was a considerable emphasis on finding variables that predict employment and other positive outcomes following vocational services. The three major outcomes were tested for statistical significance against a variety of demographic, coping ratings, disability, and interview ratings. Only the Global Assessment of Functioning (GAF) was found to predict outcomes (Table 4-9). The overall significant difference between the three groups on GAF ($F = 8.992$; $df = 2,44$; $p = .001$) can be attributed to the significant differences between the two employed subgroups and the unemployed subgroup. Both the new employment and ongoing employment had significantly higher ratings than the unemployed consumers (Scheffe = 15.94, $p = .001$; Scheffe = 12.32, $p = .004$, respectively). There is a definite relationship between the consumer's current level of functioning and whether or not he/she is employed.

Consumer Level of Functioning at Time of Interview

Consumers were interviewed between five months and six years after leaving the Mainstream program. The consumer questionnaire and interview sought data on functioning in the areas of (a) housing and financial support, (b) community integration, (c) satisfaction with life, and (d) dealing with disability.

Housing and Financial Support

Table 4-10 presents financial and social living conditions at the time of the interview. Consumer' mean monthly rent or mortgage payment was \$394.99, and the mean percent of total monthly income spent on rent or mortgage was almost 40 percent. At the time of the interviews, monthly rent for a two-bedroom apartment in the Minneapolis suburbs was about \$600. Consumers

reported paying between \$51 per month in housing (public housing) to over \$1100 (mortgage on a newer home). The percent of income going to pay rent or mortgage ranged between 10 and 100 percent (for two marginally employed consumers living at home who turned paycheck over to aging parents).

Table 4-9. One-Way Analysis of Variance on Global Assessment of Functioning by Employment Outcome

Employment Outcome by Subgroup	Descriptive Statistics					
	Number	Mean	Standard Deviation	Scheffe Tests of Individual Means		
				Pairs	Mean Difference	p
Unemployed	10	39.60	10.81	Unemployed-new	12.32	.004
New employment	24	51.92	9.22	Unemployed-ongoing	15.94	.001
Ongoing employment	13	55.54	8.27	New-ongoing	3.622	.534
One-way ANOVA. $F = 8.992$ ($df = 2, 44$; $p = .001$)						

The consumers were also asked if they considered rent an affordable expense and whether their rent was subsidized (Table 4-10). Slightly over three-fourths of the consumers considered their rent to be affordable. Under 25 percent were receiving a rent subsidy, and many of these persons living in public housing. Twenty-one of the 48 consumers owned or were purchasing their homes. Six consumers were in supported or supervised housing and two reported living with friends. Over 85 percent of the consumers were living independently.

Typically consumers relied on two income sources (Table 4-11). The most common sources of support and pattern were Social Security Disability Insurance (SSDI) and earnings from a part-time job. Persons working on part-time jobs tended to be employed at the skilled and semi-professional skill levels. Persons employed full-time comprised about a third of the sample and tended to hold professional and semi-professional jobs. Persons also received family help from employed spouses, parents, and siblings. No consumer received private disability insurance. Sources of financial support were not significantly related to the disability, onset, and outcome.

Table 4-10. Present Housing Conditions

Housing Characteristic	Descriptive Statistics		
	Number	Mean	Standard Deviation
Monthly rent or mortgage amount	41	394.99	223.86
Monthly rent divided by receipt of subsidy			
None	29	470.33	218.35
Subsidy	11	197.36	86.76
Percent of monthly income spent for rent	42	39.69	20.25
Percent of monthly income spent by subsidy			
None	30	43.17	22.68
Subsidy	11	29.27	4.80
Housing Characteristic and Response Category	Frequency	Percent	
Is rent affordable?			
Yes	36		76.6
No	<u>11</u>		<u>23.4</u>
Total	47		100.0
Rent subsidy?			
None	36		76.6
Subsidy	<u>11</u>		<u>23.4</u>
Total	47		100.0
Home ownership			
Own or purchasing	21		43.8
Renting	19		39.6
Supported housing	6		12.5
None of the above	<u>2</u>		<u>4.2</u>
Total	48		100.0
Persons living with consumer			
None (alone)	22		50.0
Spouse or significant other	15		34.1
Other (parents, friends, children)	<u>7</u>		<u>15.9</u>
Total	44		100.0
Present type of housing			
Independent	41		85.4
Relative	2		4.2
Supported	4		8.3
Board and care	<u>1</u>		<u>2.1</u>
Total	48		100.0

Table 4-11. Sources of Financial Support

Type of Support and Rank	Frequency	Percent Receiving	Type of Support and Rank	Frequency	Percent Receiving
SSDI	26	54.2	Supported housing	3	6.3
Part-time employment	20	41.7	VA disability	2	4.2
Full-time employment	15	31.3	Friends	2	4.2
Family	9	18.8	General assistance	1	2.1
Other sources ①	5	10.4	AFDC	1	2.1
SSI	3	6.3	Disability insurance	0	0

① Includes partners, working for non-reported income.

Community Integration

Two interview questions inquired about present activities and community involvement. The responses to these two questions depended a lot on the consumer's employment outcome. The unemployed persons were limited in activities. Three persons in this group were involved in regular volunteer work. One had younger children, and another was living in a community residential setting at the time of the interview. Several others reported almost no activities: "...I don't go anywhere. I don't do anything, just the bare necessities to get by. The rest of the time I spend lying down."

Employed consumers' responses were very different. Almost every one of them mentioned employment and employment related activities, such as additional education or study, as major present activities.

- "Two part-time jobs, internship, and classes at Metro State."
- "Working 32 hours a week. That's really as much as I can handle now. Minimally helping with house remodeling and doing all the house work."
- "Working-full time. I keep my [professional] license up so every two years I have to do this..."

Community involvement revealed four types of activities. The first was a variety of self-help, mental health, and religious groups. Persons attended AA meetings, socialized at community drop-in centers, participated in community support programs, and were involved in churches. Secondly, persons were involved in a variety of hobby and special interest groups, such as a computer club and Toastmasters International. Involvement in professional organizations was the third activity. The last type of involvement was through informal networks of friends and families. One person summarized the responses of many others:

"I just joined the Minnesota Bar Association, some professional groups, and I go to church. I try to keep in touch with my family. I don't have any other social things beyond that."

In spite of the active involvement of some persons in community life, several persons reported little socialization either within formal groups or with friends. Lack of friends was mentioned by several persons during the interviews, while other consumers reported that they spent so much energy in work and work-related activities that they had neither energy nor time for many social activities. None of the activities mentioned could be considered expensive hobbies (e.g., photography, collecting, automobiles) or activities (e.g., professional sports events, theater, music concerts).

Satisfaction With Life

During the interview, consumers completed two rating scales about satisfaction with present and past life, the purpose of which was to compare present and past level of general satisfaction. No statistically significant differences were found between the ratings of present and past satisfaction with life. Consumers reported being mildly satisfied with their present lives and with their lives prior to the onset of their disabilities (Table 4-12). Given vocational and other problems related to psychiatric disability, it might have been expected that consumers would have been more pleased with life prior to onset.

Table 4-12. Satisfaction With Life Ratings

Satisfaction with Life Items	Descriptive Statistics			Paired t-test		
	Number	Mean	Standard Deviation	t	df	p
Present satisfaction with life	46	4.30	1.38	.350	45	.728
Satisfaction with life before onset	47	4.45	1.65			

Note: Possible scale values ranged between 1 and 7, with 7 as the highest rating.

Stability of satisfaction. Two related interview questions asked consumers how satisfied they were with their present lives and how they would change their lives, if they could. Unemployed consumers were not satisfied with their present lives. Some typical responses were as follows:

- "Completely unsatisfied."
- "Sometimes almost suicidal. I mean you get these flashes. I feel cornered a lot, which I think is the best way to put it."
- "I'm not satisfied at all. I'm frustrated. It's a daily struggle."

Employed persons, while satisfaction was mixed, were generally more positive and reported being "pretty satisfied" and "very satisfied." Others were unsure or negative. Consumers tended to relate their present satisfaction to how well they were functioning in employment and other aspects of their lives:

- "Pretty satisfied. I feel that my illness has gotten a lot better. I work hard. I feel that working full-time and supporting myself is a goal I had since the first day I was sick. I

- just recently feel that I reached that goal and that makes me pretty happy.”
- “...I make enough money and keep my expenses within reason that I think I’ve found a good balance. When I started at [name of employer], I told them how important the band was to me and decided that I wouldn’t work there if I couldn’t have time to play in the band.”
- “I struggle to this day with wishing I could be dead. I’m not happy at all. I think this has a great deal to do with a career loss and some other personal goals that I have not been able to obtain.”

How consumers would change their lives, if possible, was related to present satisfaction. Consumers reported that they would change their lives in three major ways if they could: (a) deal with mental illness, (b) change careers, and (c) change personal lives. While many of the consumers wanted to be recovered from mental illness or never to have had it, several consumers did not even mention their psychiatric disability. Career changes centered on getting additional education, having completed training in prior years, and upward mobility. Personal life changes clustered on relationships with family.

Support from family and friends. Many of the consumers were estranged from their families or from specific persons in their families: “No support from family. I virtually have no contact with my family.” Other families were very supportive: “Good support from parents and wife.” Likewise, many consumers reported having friends to depend on for support: “I think I receive more support from friends than I do from [my] family.” The closest friends of many consumers were often other persons with psychiatric disabilities. None of the consumers listed a professional mental health or vocational rehabilitation provider as a friend.

Our analyses did not reveal any patterns of support related to program outcome. Consumer responses ranged from perceiving themselves as being an embarrassment to their families to having generous financial and social support from family members.

Self-comparison to peers. Another measure of present functioning was how the consumers compared themselves with others about the same age and with similar educational backgrounds, a comparison important in American society: How good am I compared to my peers? This was the most emotionally laden item on the interview, and many consumers were visibly upset in having to make this comparison. The most common response was the realization that they were behind their educational cohorts:

- “What do you mean by career growth? I mean, your career depends on people’s willingness to give you employment. I haven’t had that chance....”
- “I feel I’m behind in career growth. I feel a lot of my adult life was dealing with mental health issues, either in institutions or organizations helping the mentally ill. I haven’t had much real higher-powered career experience....”
- “Career growth is retarded. I’ve been unemployed most of my adult life. Someone with my profile should have been working effectively, and that is why I got Social Security [Disability Insurance Benefit] so fast. When I had applied for it, I’d been grossly unemployed for ten years....”

Consumers offered explanations for their lack of career development: interrupted education, loss of jobs, and personal problems. Others felt that they were beyond such comparisons for a variety of reasons: no longer cared about a "fast track" career, had developed other values that were now more important, and a belief that their careers were over.

Dealing With Disability

Consumers had to cope daily with their symptoms and to manage their mental health. On a rating scale from 1 to 7, the mean rating for managing mental health was a 4.98; consumers felt they were in control of their symptoms most of the time (78.67%) (Table 4-13). When their responses were classified according to outcome, onset, and type of disability, mixed patterns emerged. Persons with mood disorders rated themselves significantly lower on managing their mental health than did persons with other psychiatric disabilities ($t = 3.167$; $df = 43$; $p = .003$). Likewise, there was a trend for persons in the Prior Work History Group (i.e., unemployed) to rate themselves lower on managing their mental health than either of the two employed groups. However, there was no statistically significant relationship between age of onset and self-management of mental health.

The lower half of Table 4-13 reports percent of time the consumers were able to cope with their mental health, with the definition of "cope" left to the consumer. There was a significant difference by type of disability ($t = 2.176$; $df = 43$; $p = .035$). Persons in the sample with other disorders (i.e., schizophrenia and related, personality disorder, and others) reported being better able to cope with their mental illness than did persons with mood disorders. Again, there were no clear trends indicative of outcomes and onset of disability.

Other indications of coping skills were obtained from responses regarding symptom identification and ability to function. Persons with mood disorders reported a variety of symptoms: anger, anxiety, panic attacks, a lack of consistent behavior, sleep disturbances, desire to sleep all the time, and problems remembering or concentrating for long periods of time. Consumers described their symptoms in the following ways:

- "Memory impairment - both putting in information or getting information out. Much lesser tolerance for stressors with a great deal of anxiety, occasional panic attacks. Then, of course, depressed mood."
- "Consistency.... Do I feel well enough to go to work everyday? Some days, no, I don't. Part of that is due to the medication, part of it's due to the illness and I really can't separate them anymore. That's the biggest. The second biggest is probably sleep."

For some consumers with mood disorder, increases in the symptoms listed immediately above indicated their becoming dysfunctional. Other indications were problems getting out of bed, loss of emotion, loss of sleep, being tired, and racing thoughts. Persons with mood disorders reported getting overwhelmed by a task or the need to respond in a rational way.

Persons with schizophrenia and related disorders. The second largest diagnosis group was persons with schizophrenia and related disorders. As expected, these persons experienced auditory and some visual hallucinations, high levels of anxiety, limitation of range of responses, a

loss of concentration, and the related inability to attend to details:

Table 4-13. Descriptive Statistics and Tests for Significance for Disability Variables

Mental Health Variables	Descriptive Statistics			Statistical Test for Difference		
	Number	Mean	Standard Deviation	Statistic	Degrees of Freedom	p level
How well managing mental health? (Total sample) ¹⁾	45	4.98	1.12	Not Relevant		
Outcome						
Prior work history group	9	4.22	1.09	F = 2.630	df = 2,41	p = .084
New employment group	23	5.17	0.98			
Ongoing employment group	12	5.08	1.24			
Onset						
Before first college entrance	18	4.72	1.32	t = 1.400	df = 40	p = .169
After first college entrance	24	5.21	0.93			
Type of disability						
Mood disorder	29	4.62	1.12	t = 3.167	df = 43	p = .003
Other disorder	16	5.63	0.81			
Percent of time cope with mental health (Total sample) ²⁾	45	78.67	16.60	Not Relevant		
Outcome						
Prior work history group	9	71.11	23.15	F = 1.410	df = 2, 41	p = .256
New employment group	23	79.13	14.43			
Ongoing employment group	12	83.33	14.97			
Onset						
Before first college entrance	18	74.44	19.47	t = 1.310	df = 40	p = .198
After first college entrance	24	81.25	14.24			
Type of disability						
Mood disorder	29	74.83	17.85	t = 2.176	df = 43	p = .035
Other disorder	19	85.63	11.53			

¹ Possible scale values ranged between 1 and 7, with 7 as the highest rating

² Possible range between 1 and 100 percent.

- "...My symptoms are more hallucinations. I hear voices. They interfere with my thoughts. I have a little bit of thought disorder, but it's gotten better with meds...."
- "You're always trying to figure out what you did wrong so you don't flip out again. You're always trying to figure out how you can change so you can handle a job."

Consumers with schizophrenia recognized some of the signs of becoming dysfunctional such as hallucinations, sleep problems, loss of appetite, and desire to be alone. The small number of consumers with other psychiatric disabilities also reported panic, anxiety, trouble in organizing thoughts, emotional control, and obsessing about activities. Persons in all groups mentioned that the loss of ability to concentrate and to focus on a task for several hours was their most severe vocational problem. Most of the jobs held by persons in this study required a combination of a specific body

of knowledge (e.g., law, medicine, engineering) and an ability to apply that knowledge to solve problems, change situations, create new things or ideas, and interact professionally with other persons.

In summary, most consumers had considerable financial and almost total social independence. Although slightly over half of the consumers received SSDI, 73 percent were employed either full- or part-time. While moderately satisfied with their present and past lives, consumers experienced considerable disappointment in their careers and, in many cases, a lack of community integration. In addition, consumers were to a considerable degree able to identify their symptoms and when they were becoming dysfunctional. Based on interview responses, the most critical dysfunction was a loss of concentration over a long period of time.

Educational and Employment Histories

This section presents the consumer's educational and employment histories prior to entering Minnesota Mainstream. All data in this section came from the consumer questionnaire, which permitted consumers to report on up to six post-high school educational institutions and up to six occupations.

Educational History

Prior to entering Minnesota Mainstream. Minnesota Mainstream admissions requirements defined "professional" as an individual who earned at least a bachelor's degree. The mean number of years of higher education was two beyond the bachelor's, with many consumers having advanced degrees. Highest degrees achieved by consumers prior to entering Mainstream are presented on Table 4-14. Over half of the consumers had earned a bachelor's degree. The next most common degree was a master's in a professional discrete area (e.g., social work, engineering, education). There were also several persons with professional degrees in medicine and law.

Reported higher education was classified according to the two digit Classification for Instructional Purposes (CIP) codes developed by the U.S. Department of Education. There are 52 major areas (e.g., liberal arts, construction trades, mechanics and repairers, engineering, business administration) that are sub-divided into speciality areas (e.g., English history, carpentry, vehicle repair, mechanical engineering, cost accounting).

Upon reviewing these categories, it was apparent that some codes were more directly related to specific occupations than others. For example, a degree in elementary education commonly led to a position as a grade school teacher; electronics engineering education led to occupations in the computer and communication industries. For other degrees, direct applications of degrees to jobs/occupations was less direct—for example, vocational opportunities for liberal arts, English, and foreign literature majors.

**Table 4-14. Highest Degree Awarded
Prior to Program Entry**

Highest Degree	Frequency	Percent
Bachelor's	25	52.0
Master's in academic subject	2	4.2
Master's professional	13	27.1
Law (JD)	3	6.3
Doctor of medicine/dentistry	3	6.3
Ph.D.	2	4.2
Total	48	100.1

Therefore, CIP codes were classified as either liberal arts or technical (Table 4-15). Table 4-15 lists the CIP codes for education attained by consumers (note that not all 52 major areas are represented) and classified them accordingly.

**Table 4-15. Classification for Instructional Purpose Codes
(CIP) Into Liberal Arts and Technical**

Liberal Arts	Technical
05 Area, ethnic, and cultural	04 Architecture
09 Communications	11 Computer sciences
16 Foreign languages	12 Personal service
23 English language and literature	13 Education
24 Liberal arts	14 Engineering
30 Interdisciplinary studies	22 Law and legal studies
38 Philosophy and religion	26 Biological and life sciences
45 Social sciences and history	27 Mathematics
50 Visual and performing arts	39 Religious vocations
	40 Physical sciences
	42 Psychology
	44 Public administration and service
	51 Health professions and related
	52 Business administration

Table 4-16 reports proportions of consumers by type of degree from the first four higher educational institutions attended prior to Mainstream entry.⁵ This table cross-tabulated the type of degree (if any) with the classification of that degree as liberal arts or technical. Over half the sample

⁵Only two consumers attended more than four schools, and one consumer received her first bachelor's degree at the fifth school, 17 years after she completed high school. The second was a physician attempting to complete her residency.

(55.6%) received a bachelor's degree from the first college they attended, 28.9 percent either changed schools or dropped out before obtaining a bachelor's degree, and 8.9 percent obtained a certificate in a specific job area (i.e., cosmetology, welding, nursing assistant, bookkeeping). Of the 39 consumers who attended a second school, 41 percent completed a bachelor's degree, 20.5 percent dropped out, and about 28 percent completed a master's or first professional degree (e.g., law, engineering, education). Over half the sample attended a third higher education institution where one-third completed a professional degree, another third received no degree, and the remaining third received a bachelor's or less.

In summary, the median number of years of formal education was two years beyond the bachelor's, and the typical consumer attended at least three colleges. The most important education trend was the gradual change from degrees in liberal arts to technical degrees. Consumers took longer to complete their bachelor's degrees than the traditional four years. While consumer responses to interview questions on disability impact on education were somewhat mixed, many consumers reported considerable educational problems resulting from their disability. The most common problem reported was a loss of ability to concentrate.

Pre-Mainstream Employment History

Participation in the labor force. With one exception, all consumers held one or more jobs prior to entering Mainstream. Summary data on jobs they held (up to the six asked for) are presented on Table 4-17. The characteristic reported is the age of the consumer when starting each job. The mean age for entering each job, of course, increased as the person grew older. However, when ranges and standard deviations for years are examined, it becomes apparent that the 48 consumers started their first job at a wide variety of ages. For example, while the mean age for entering Job 1 was 30.73 years old, the consumers' ages ranged from 20 to almost 50.

The mean number of years on each job is the second characteristic presented. Their first job was typically held for about five years. After this initial job, the number of years on each job declined to half of this initial five years. This pattern is opposite the national trend where persons hold jobs longer as they age.

Earnings and work stability. Hourly wage, hours worked weekly, and estimated weekly income were also computed. Hourly Wage and Hours Worked Weekly were taken directly from the consumer questionnaire. Estimated Weekly Income was calculated by multiplying hourly wage by hours worked per week. There was a gradual reduction in wages after the first job. As with Age Started Job and Number of Years on Job, the frequency distributions had large standard deviations compared to their means, indicating an unusually wide variety of responses. As the number of jobs held increased, the Estimated Weekly Income standard deviations and range became narrower. Thus, as consumers increased the number of jobs, their income not only dropped, but became more similar (i.e., smaller standard deviations in comparison with the means).

Table 4-16. Higher Educational Institution and Type of Major Prior to Mainstream Entry

Type of Degree	Higher Educational Institution and Type of Major														
	School 1			School 2			School 3			School 4			Total		
	Lib.	Tech.	Total	Lib.	Tech.	Total	Lib.	Tech.	Total	Lib.	Tech.	Total	Lib.	Tech.	Total
No Degree Number Percent	5 27.8	8 29.6	13 28.9	1 25.0	7 20.0	8 20.5	4 57.1	5 27.8	9 36.0	0 0.0	2 22.2	2 22.2	10 34.5	22 24.7	32 27.1
Certification in Specific Area Number Percent	2 11.1	2 7.4	4 8.9	0 0.0	0 0.0	0 0.0	0 0.0	1 5.6	1 4.0	0 0.0	2 22.2	2 22.2	2 6.9	5 5.61	7 5.93
Associate Degree Number Percent	1 5.6	2 7.4	3 6.7	0 0.0	4 11.4	4 10.3	1 14.3	1 5.6	2 8.0	0 0.0	0 0.0	0 0.0	2 6.9	7 7.86	9 7.62
BA/BS Number Percent	10 57.9	15 55.6	25 55.6	3 75.0	13 37.1	16 41.0	1 14.3	3 16.7	4 16.0	0 0.0	2 22.2	2 22.2	14 48.2	33 37.1	47 39.8
MA/MS Academic Number Percent	0 0.0	0 0.0	0 0.0	0 0.0	1 2.9	1 2.6	0 0.0	1 16.7	1 4.0	0 0.0	0 0.0	0 0.0	0 0.0	2 2.24	2 1.7
Professional - Post BA/BS Number Percent	0 0.0	0 0.0	0 0.0	0 0.0	10 28.6	10 24.6	1 14.3	7 38.9	8 32.0	0 0.0	3 33.3	3 33.3	1 3.4	20 22.5	21 17.8
Total Number Percent	18 40.0	27 60.0		4 10.3	35 89.7	39 100.0	7 28.0	18 72.0	25 100.0	0 0.0	9 0.0	9 100.0	29 24.6	89 75.4	118 100.0
Years at Each School Frequency Mean Standard deviation	45 3.48 2.12			39 2.44 1.54			25 3.05 3.26			9 2.73 3.23			Not Applicable		

Table 4-17. Employment History Prior to Entering Mainstream

Characteristic	Job					
	Job 1	Job 2	Job 3	Job 4	Job 5	Job 6
Age Started Job						
Number	44	33	25	22	14	7
Mean	30.73	33.70	35.51	37.17	38.63	43.55
Standard deviation	7.31	6.32	6.57	6.88	6.60	4.25
Number of Years on Job						
Number	44	33	25	22	14	7
Mean	4.77	2.50	1.74	2.23	1.81	2.13
Standard deviation	4.18	2.36	1.48	1.56	1.68	1.48
Estimated Weekly Income						
Number	40	32	22	17	13	6
Mean	447.48	326.32	343.69	355.54	238.19	231.00
Standard deviation	374.92	172.98	222.09	225.41	143.68	160.92
Hourly Wage						
Number	40	32	22	18	13	6
Mean	12.16	9.24	9.40	9.14	7.29	6.96
Standard deviation	7.83	3.13	3.99	4.01	3.36	1.57
Hours Worked Weekly						
Number	43	33	25	20	14	7
Mean	37.47	34.30	37.24	35.45	31.93	31.29
Standard deviation	10.82	12.60	11.46	12.39	9.64	15.04
Job Satisfaction Rating						
Number	40	28	27	22	13	10
Mean	5.07	4.89	4.41	4.00	4.00	4.30
Standard deviation	1.35	1.55	1.42	1.66	1.29	1.70
Job Skill Rating						
Number	41	29	28	23	13	10
Mean	3.71	3.62	3.36	3.09	2.62	2.80
Standard deviation	0.96	0.98	1.03	1.24	1.19	1.03

Hours Worked Weekly was the next characteristic reported. The mean number of hours worked was 37.47 hours per week for Job 1. This number declined about five hours per week by Job 5 and Job 6. Most of this narrowing of the frequency distribution from Estimated Weekly Income is attributed to the Hourly Wage. As the number of jobs held increased, the Hourly Wage standard deviations and ranges declined, indicating increased homogeneity among the groups with subsequent jobs.

Job satisfaction and skill. The final two employment measures reported on Table 4-17 were ratings of Job Satisfaction and Job Skills. For each job held, the consumer was asked to rate his/her job satisfaction on a scale between one (low) and seven (high). The Job Satisfaction ratings declined

between Job 1 and Job 6; a mean of 5.07 on Job 1 to a low of 4.00 at Job 6. A similar pattern was found for ratings of Job Skill Rating. The job skill of persons employed prior to entering Mainstream declined significantly ($F = 3.02$; $df = 5, 60$; $p = .012$) between Job 1 and Job 6.

In reviewing Table 4-17, a general decline is observed on all measures between Jobs 1 and Job 6. The length of time on each job, hourly wages, hours worked, estimated income, job satisfaction, and job skill gradually declined across the job history.

Working conditions and job changes. Reasons for leaving jobs were coded as follows according to the focus of their cause: positive, negative, neutral, due to changes in psychiatric disability or physical problems.

Positive Reasons: Promotion, continued education, changed career fields, found a better job.

Negative Reasons: Fired, supervisory problems, did not like job, could not perform specific task(s), and interpersonal interaction.

Neutral Reasons: Temporary job, company went bankrupt, and moved.

Psychiatric: Increased mental health symptoms to the point where continued employment was not possible.

Physical: Increased physical problems prevented continuing on the job.

With the exception of psychiatric reasons, the above are common reasons given by all persons who leave their job.

Table 4-18 presents a summary of the reasons for leaving a job from all jobs held by consumers prior to Mainstream entry. Because no statistically significant differences between reasons for leaving by job held were found, data were combined. The most common reason reported was loss of a job through negative reasons, followed by positive and neutral reasons. Slightly less than 20 percent of reasons to leave a job were for psychiatric reasons. Some of the negative reasons for leaving a job, though, could be related to psychiatric disability. For example, problems in interacting with co-workers and supervisors could be a symptom of disability or they could reflect the reality of working in "a very dysfunctional office."

Use of accommodations and support. Closely related to reasons for leaving a job were two questions dealing with accommodations and support. Prior to entering Minnesota Mainstream, consumers generally did NOT ask for any accommodations on their jobs. Not seeking accommodations was attributed to several reasons by consumers: (a) not wanting to ask because of stigma, (b) believing that they could learn to function without accommodations, and (c) lack of insight in their mental illness and what was needed to assist in job retention. In two cases, consumers asked for accommodations only to have them refused by management. For only 17 percent of the jobs, consumers asked for and received accommodations. The most common accommodations were flexible scheduling and working part-time. Some examples of accommodations were:

- "Was able to spread out appointments to one or two per week."
- "Just to watch out for if I became paranoid or over stressed or untrusting."
- "Yes, leave for 2 hospitalizations, part-time hours, phone calls for support."

Table 4-18. Reason Left Job, Accommodations, and Support for All Jobs Held Prior to Mainstream Entry

Characteristic and Category	Frequency	Percent
Reason Left Job		
Positive reasons	33	24.6
Negative reasons	40	29.8
Neutral reasons	33	24.6
Psychiatric	26	19.4
Physical	<u>2</u>	<u>1.5</u>
Total	134	99.9
Accommodations		
None	97	81.5
Accommodations	20	16.8
Asked, not given	<u>2</u>	<u>1.7</u>
Total	119	100.0
Support Received		
No support	75	72.8
Support	<u>28</u>	<u>27.2</u>
Total	103	100.0

- "Work own schedule."
- "Thirty hours rather than full time - worked 40 plus hours."
- "Flexible schedule."
- "Telecommuting 1 day per week."
- "Open minded management."
- "Part-time; time off to attend groups."
- "PC for case notes, time off for medical appointments."
- "[Employer] allowed [me] to work out of my home."
- "Yes, work at my own pace."
- "I was free to reschedule work days around my disability if necessary. Also, I could listen to music of my own choice."

Consumers sought and received support for 27 percent of the jobs. Some examples of support received are as follows:

- "Counseling during [the] first 18 months."
- "Psychiatrist, therapist, depression group, family...sister is a psychiatrist."
- "Close supervisor as a VISTA, peer counseling."
- "Support from disability services U of M."
- "First supervisor was especially understanding, and ok when I needed to cry, often at times."
- "Supervisor was very understanding and supportive of my disability."

- "Christian Education Board."
- "I was considered supported employment."
- "Management tried to help."

As indicated from these comments, the two most common sources of support were from mental health professions and supervisors. Apparently, little support was sought and received from co-workers. Prior to entering Minnesota Mainstream, the majority of consumers changed jobs for non-disability related reasons and few received, asked for, or received an accommodation or support.

Career Development Patterns

Five Patterns of Career Development

Following the first 14 consumer interviews, data were reviewed to identify potential career history patterns. Using data from the consumer questionnaire and interview and suggested patterns from reviewing the career development literature, five mutually exclusive career patterns were hypothesized. An SPSSx computer program was developed to classify consumers into the five patterns based on the following: age of disability onset, age at completion of first bachelor's degree, employment history, skill level of jobs, length of time on job, employer's Standard Industrial Classification (SIC) code, the job's CIP code, and age at time of entry into the Minnesota Mainstream program. Each pattern assumes a critical event or series of closely related events resulting in the need for vocational and other services, and, finally, referral to the Minnesota Mainstream program.

A summary of the patterns follows, and they were found to apply across the entire Mainstream sample.

Career Constant with Post-Formal Education Disability Onset (Pattern A). The consumer successfully completes first bachelor's degree, obtains professional employment, has the onset of the disability, and has a decline in occupational performance and/or under-employment. The consumer obtains professional vocational assistance.

Career Constant with Pre-Formal Education Completion Disability Onset (Pattern B). The onset of the disability is before the consumer begins higher education. In spite of the disability, a bachelor's degree is obtained. Following college completion, the consumer is employed in some capacity, often with frequent job changes. Finally some critical event results in professional vocational and other assistance.

Career Change with Post-Formal Educational Disability Onset (Pattern C). This is the same as Pattern A, except that the consumer changes to another profession after a decline in occupational performance.

Career Change with Pre-Formal Education Completion Disability Onset (Pattern D). In this pattern early onset is followed by higher education, professional employment, decline in employment status, and a shift to a new career field.

No Career with Varying Onset (Pattern E). In this pattern, the defining events are continuing unemployment and/or underemployment. Age of onset can be either pre- or post-formal education completion.

The computer program was used to classify the 48 persons into one of the five patterns described above. The differences between Patterns B and D are (a) professional employment is the third step in Pattern D and any employment is the third step in Pattern B; (b) in Pattern B, the consumer does not change to another profession; and (c) in Pattern D, persons change professions following a decline in occupational performance. There was no relationship ($X^2 = 7.71$; $df = 8$; $p = .463$) among these five patterns and the three consumer outcomes (i.e., Not Employed, Prior Work History Subgroup; Employed, New Employment Subgroup; and Employed, Ongoing Employment Subgroup) that accounted for 47 of the 48 persons in the study.⁶

Career constant with post-formal education disability onset (Pattern A) (n = 2). The two persons in Pattern A completed their formal educations and were employed professionally in occupations consistent with their formal educations for over 12 years before the onset of their disabilities. The specific sequence of events were:

1. Higher education to at least the BA/BS level. One consumer was a medical professional and the other had a degree in economics.
2. Professional employment. Both persons were employed professionally, one as the owner-president of a large real-estate agency for 13 years and the other for 22 years as a medical professional.
3. Onset of disability. Ages 48.38 and 37.82.
4. Change in occupational performance. The declines in occupational performance were a gradual reduction in number of patients and hours worked per week and dramatic reduction in business income over a one-year period.
5. Critical event(s) resulting in need for vocational services. Both of these persons experienced a fairly sudden onset of their disabilities.
6. Minnesota Mainstream participation. These two consumers were in the program for about sixteen months.
7. Outcome:

Not Employed, Prior Work History Subgroup. One person (50%).

Employed, New Employment Subgroup. One person (50%).

Employed, Ongoing Employment Subgroup. No persons.

Career constant with pre-formal education completion disability onset (Pattern B) (n = 8). The eight persons in Pattern B completed their first bachelor's degree after the self-reported

⁶One consumer had no employment history.

onset of their disability. Following the completion of this first degree, all were employed in at least one professional or semi-professional job consistent with their education. Several persons in this group experienced occupational decline prior to entering Mainstream.

1. Onset of disability. All eight persons in this group reported onset prior to completion of their first bachelor's degree. Self-reported age of onset ranged between 16.55 years and 24.73 years. Three persons reported onset in their teens and five in their early to mid-twenties. Age of first contact with mental health professionals ranged between 14.61 and 27.73.
2. Higher education to at least the BA/BS level. Although all persons in Pattern B completed at least a bachelor's degree after onset, there were considerable differences in the number of higher education institutions attended and the amount of post-undergraduate education obtained. Five persons received a bachelor's degree from their first school (i.e., philosophy, nursing, engineering, biology, and drama.). Three other persons changed colleges prior to receiving their first degrees in engineering, history, and accounting. Three persons in this pattern also earned advanced degrees in medicine, landscape architecture, and business and marketing. Two persons had no formal education beyond the bachelor's, and two persons returned to school for a second bachelor's degree in communications and counseling.
3. Change in occupational performance. (Professional to unskilled, often with frequent job changes). All consumers in this pattern were employed following the completion of a bachelor's degree in a wide variety of professional and semi-professional occupations: technical writer, accountant, physician, chemical engineer, electronic engineer, and stage director. Each person in this group held at least one professional or semi-professional job consistent with his/her formal education. Four examples were (a) communications degree to technical writer, (b) chemical engineering degree to refrigeration design engineer, (c) drama degree to stage manager, and (d) community counseling degree to counselor.

Although four persons remained in professional (e.g., electronics engineer, landscape architect) or semi-professional occupations (e.g., accountant and counselor) prior to Mainstream entry, the remaining four persons had declining job skill status after initial professional employment (i.e., technical writer to hospital admitting clerk to janitor, and from mechanical engineer to kitchen helper). One person had just completed a MBA prior to the interview and was employed part-time selling computers.

4. Critical event(s) resulting in need for vocational services. Regardless of pattern, all persons in this sample experienced one or more key events that caused them to seek vocational assistance. In Pattern B, increasing loss of functioning from depression and schizoaffective disorders resulted in job change and/or declining skill level. For example, one consumer had worked as a counselor for about 15 years before needing assistance from Minnesota Mainstream to keep her job and improve her functioning.
5. Minnesota Mainstream participation. The average age of program entry for Pattern B

was 37.86, indicating that persons in this pattern entered the program at a slightly younger age when compared with the entire sample. Length of time in the program ranged between 0.68 year and 3.86 years.

6. Outcomes:

Not Employed, Prior Work History Subgroup. One person (12.5%).

Employed, New Employment Subgroup. Three persons (37.5%).

Employed, Ongoing Employment Subgroup. Four persons (50%).

Career change with post-formal educational disability onset (Pattern C) (n = 11). In Pattern C persons completed at least their initial bachelor's degree and then were employed in a variety of professional and semi-professional jobs prior to disability onset. Following onset there was a decline of skill level followed by a change to another occupational area.

1. Initial higher education. All persons in this group received a bachelor's degree prior to their first professional employment. Eight of the 11 initial degrees were in technical areas (e.g., biology, communications, journalism, computer science), and 3 were in liberal arts. Eight persons were under age 26, two others were in their younger 30s, and one person was 47 when they received their first bachelor's degree. The person who was age 47 completed her degree after being enrolled in higher education on four prior occasions. Seven persons in Pattern C completed advanced degrees in theology, computer science, psychology (2), medicine, library science, and health services administration. Another person, a graduate student in educational psychology, ended her education without completing a doctorate.
2. Professional employment before onset. All 11 persons were employed in a variety of professional and semi-professional (i.e., skill levels 5 and 4) occupations prior to their self-reported onset. They were a reference librarian, photojournalist, service director, technical writer, clergy member, program analyst, guidance counselor, graduate assistant, probation officer, health care facility administrator, and physician.

Four persons in Pattern C were employed at the professional or semi-professional level (minister, probation and parole officer, programmer analyst, and self-employed technical writer) at the time of onset. The remaining persons showed a decline in skill levels prior to onset (i.e., health care facility administrator to real estate sales agent, high school guidance counselor to package delivery, sales manager to sales representative, and photojournalist to underwriting clerk).

3. Onset of disability. The self-reported age of onset ranged between 27.73 and 53.03 years. In spite of this range of over 25 years, each person held at least three jobs prior to onset.
4. Change in occupational performance. Following onset, there was a decline in employment skill level. For example, one person moved from sales representative to telemarketer. Another person went from a writer to a small landscape contractor. A third person went from being reference librarian to office helper.

5. Change to another profession. In this group onset and occupational skill level decline were followed by a change in profession, as measured by each occupation's CIP code (see Methodology section). Some examples were sales representative to food service manager, security guard to supported employment, data entry clerk to graduate assistant, survey worker to bookkeeper, and landscape contractor to residence supervisor. For three persons in Pattern C, these changes in career were accompanied by additional specialized education in social work, microbiology, and industrial design.
6. Critical event(s) leading to vocational services. The events resulting in Mainstream services were essentially the same for each person in this study. Persons were either unemployed, underemployed, or needed services to retain their present employment. For example, two persons in this group sought help after having been fired from jobs. One person was underemployed as a data entry clerk.
7. Minnesota Mainstream participation. The age at which the persons in Pattern C entered Mainstream ranged over 20 years: 32.85 to 55.32. Time in the program for these eleven persons was between six months to over three years.
8. Outcomes:

Not Employed, Prior Work History Subgroup. Two persons (18.2%).

Employed, New Employment Subgroup. Six persons (54.5%).

Employed, Ongoing Employment Subgroup. Three persons (27.3%).

Career change with pre-formal education completion disability onset (Pattern D) (n = 19). Pattern D was the most common pattern. For all persons in this group, the self-reported onset was prior to completion of the first bachelor's degree. Higher education was followed by professional or semi-professional employment, which in turn was followed by a change to another occupational area.

1. Onset of disability. The ages of onset ranged between 2 and 33. Fifteen persons reported onset between ages 14 and 22, the most common onset age range for many psychiatric disabilities.
2. Higher education to at least the BA/BS level. Of the ten persons whose highest degree was a bachelor's degree, seven were in technical subjects (e.g., applied mathematics, nursing, chemistry, and social work); the remaining were in liberal arts (2), English, and art. The other nine persons completed a variety of higher degrees in fields such as education, law, experimental psychology, agricultural education, and human resources. Time to completion of the first degree ranged between 3.26 and 16.52 years. If we disregard the 16.52 years as an outlier, it took persons in this group an average of 4.33 years to complete their first bachelor's degree. Nine persons attended at least two institutions of higher education prior to receiving their initial bachelor's degree.
3. Professional employment. All persons in this group were employed in at least one professional or semi-professional occupation, i.e., caseworker, biochemistry technologist, retail store manager, college instructor, lawyer, teacher, job counselor, and registered

nurse. The length of their professional careers varied from just over one year to slightly over 15 years.

4. Change in occupational performance. This included reduced capacity in professional career, underemployment, or unemployment. Reduced capacity involves working part-time and/or holding a marginal job in the consumer's profession. For example, a social worker with an M.S.W. degree was employed as a psychiatric technician, and a registered nurse was working as a nursing assistant. Other persons in this group reported jobs of short duration followed by long periods of employment. Some examples of this decline in occupational skill level were retail store manager to administrative secretary, job analyst to sales representative, coordinator of volunteer services to social services aide, and special education teacher to sheltered worker.
5. Change to another profession. Persons in this pattern attempted to counter their occupational decline by changing to another profession. As with other patterns, this change in profession was defined as a change in the CIP code assigned to the occupation. In many cases, this change of occupational area was accompanied with a decline in skill level. A caseworker was employed as a cashier-checker, a teacher was working as a school bus driver, a professor became a part-time director of religious education, and a lawyer managed a small retail store.
6. Critical event(s) resulting in need for vocational services. As with all the consumers in the sample, the critical event was frequently job loss or a rapid decline in occupational status: A statistician lost his job after less than a year and worked as a janitor prior to Mainstream entry, a stage director became a telephone solicitor. For several persons the critical event was a mental health crisis resulting in job loss.
7. Minnesota Mainstream participation. The 19 persons in Pattern D were an average of 41.78 years old when they entered the program. The average duration in the program was 1.63 years.
8. Outcome:

Not Employed, Prior Work History Subgroup. Three persons (15.8%).

Employed, New Employment Subgroup. Twelve persons (63.1%).

Employed, Ongoing Employment Subgroup. Four persons (21.1%).

No career with varying onset (Pattern E) (n = 7). Persons in Pattern E had no professional or semi-professional careers. In this pattern the critical event was a long period of unemployment or underemployment. Their entire employment history was marked by long periods of unemployment interspersed with skilled occupations or less.

1. Onset of disability and higher education to at least the BA/BS level. The age of onset and the age of the completion of the first bachelor's degree varied. The two persons whose age of onset was 11.56 and 13.90 obviously completed their first degrees after onset. For two persons the pattern was reversed with completion of degrees in agricultura education and marketing more than ten years before the self-reported onset.

Finally, two persons in Pattern E completed their bachelor's degrees and had the onset of the disability within a few months of each other. One person was graduated at age 22.77 and listed her onset as 22.94 years old; the second person listed an age of onset at 24.17 years and completed a degree in industrial engineering at age 24.50. The seventh person was unable to report an age of onset.

2. Unemployment or underemployment. As stated above, the defining characteristic of this pattern was no professional or semi-professional career. Some examples were a person with a degree in accounting whose only recorded employment was 1.25 years as a bookkeeper; this person was over 53 years old when he was interviewed. A man with a degree in industrial engineering was employed in technician and assembly jobs who, prior to entering Mainstream at age 32.18, had been employed in four jobs, ranging between .33 and 2.59 years. A person with a degree in business and marketing with additional education in computer science reported employment as a machine operator, secretary, and home attendant. The longest she was employed in one job was .25 years; she was over 46 when she entered Mainstream. One person who was 31.27 at the time of the interview reported no employment.
3. Critical event(s) resulting in need for vocational services. For Pattern E persons, the critical event was the long history of unemployment and underemployment described above.
4. Minnesota Mainstream participation. The seven persons in this group consisted of two different age groups: (a) three persons between 27.62 and 32.18 upon program entry, and (b) four persons between 42.57 and 52.59. Number of years in the program ranged between .56 and 2.23 years. Age of entry did not appear to be related to number of years in program.
5. Outcomes:

Not Employed, Never Worked Subgroup. One person (14.3%).

Not Employed, Prior Work History Subgroup. Three persons (42.9%).

Employed, New Employment Subgroup. One person (14.3%).

Employed, Ongoing Employment Subgroup. Two persons (28.6%).

Early and Late Disability Onset

Career development and outcome literature suggest that age of onset is related to outcomes and events preceding these outcomes. Two different approaches were used to test this age of onset theory. First, one-way analysis of variances was calculated for age of onset as the dependent variable and the three major outcomes as levels on the independent variable (i.e., Not employed, prior work history; Employed, new employment; and Employed, ongoing employment). No significant differences were found for age of onset and levels of outcomes ($F = .30$; $df = 2, 44$; $p = .743$).

Second, no relationship of ages at which key life events occurred with age of onset were found: age entered college ($r = .213$; $df = 45$; $p = .159$), age first saw mental health professional (r

= .588; $df = 47$; $p = .001$), age first professional job ($r = .018$; $df = 47$; $p = .906$), and age of entry into the Mainstream program ($r = .266$; $df = 47$; $p = .070$). Although the correlation between age of onset and age seeking mental health help was significant, there were no statistically significant relationships between age-of-onset and the vocational variables.

In summary, five specific career patterns were identified among the 48 consumers in this study, suggesting that not all professionals with psychiatric disabilities follow the same path. Based on the analysis of variance and these correlations, age-of-onset was not related to either program outcomes or key events in the consumers' vocational lives.

Consumer Attitudes and Values about Careers

Consumers were asked about their values toward employment and careers (a) to determine how important work was to the consumers, (b) to compare the value of work with other values, and (c) to establish the existence of relationships between values and outcomes.

Consumers were asked to rank order the value statements listed on Table 4-19. The highest ranked value was family life, followed by spiritual/religious and employment. Self-support and independent living were fourth and fifth. Although employment and career advancement were values directly related to vocational goals, consumers placed a much higher value on employment than on career advancement. Mean ranks for employment, self-support, and independent living were all very close, indicating that consumers considered these three values to be of almost equal importance. Conceptually, employment is a pre-requisite for supporting one's self and for living independently and for establishing a career. There was a considerable drop between the mean rank of independent living and the next lowest value, education. Education was followed by recreation, career advancement, and hobbies. These values seem to cluster in three groups: family and spiritual, being independent, and other lesser values.

In addition to having consumers rank their values (Table 4-19), they also rated the importance of employment and career as separate concepts (Table 4-20). On a scale from 1 to 7, consumers rated employment satisfaction significantly higher than satisfaction with career development.

Another view of the importance of employment was obtained from the following question on the interview: "Do you see work mainly as a means of supporting yourself, or does it have other meanings?" The majority of the persons interviewed perceived work as a way of being productive, useful to society, a means of social inclusion, and one method to achieve fulfillment:

- "It has a deeper meaning. In fact, supporting myself is almost irrelevant. I need to have a sense of accomplishment and what I'm doing is appropriate for my values and my abilities. . . ."
- "Deeper meaning, expression of self and reputation, way of relating to others. Personal purpose."

Table 4-19. Mean Rank Order of Importance of Life Values

Value	Descriptive Statistics		
	Number	Mean	Standard Deviation
Family life	47	3.04	2.45
Spiritual/religious life	45	3.76	2.63
Employment	45	4.47	2.24
Self-support	44	4.52	2.57
Independent living	43	4.53	2.64
Education	45	5.20	2.13
Recreation	45	5.91	2.05
Career advancement	40	6.13	2.02
Hobbies	45	6.29	2.31

Table 4-20. Consumer Ratings of Importance of Values and Career

Items	Descriptive Statistics			Paired t-test		
	Number	Mean	Standard Deviation	t	df	p
General importance of employment in life	46	5.54	1.85	5.822	45	.000
Satisfaction with career development	47	3.36	1.63			

- "Other meanings. . . I derive some of my self-esteem and defining myself around my work."
- "Work in itself is important, but I think the intrinsic rewards and fulfillment would probably be more important to me. Feeling that you're doing something useful, you're making a difference, you're serving other people - I'd say that's even more important than compensation. I'm being compensated well now, too. That's one way of showing that they appreciate you."

Several other persons placed considerable emphasis on work as a way to either maintain or improve their mental health:

- "Work is not a reward for being mentally healthy, work is imperative to being mentally

healthy. I would be a basket case if I didn't have work. I know when I don't work my mind gets really strange and weird and I lose perspective. I need to work. . . ."

- "Both supporting myself and other meanings. I've been unemployed and I can't stand being unemployed - it drives me nuts. . . . Jobs are essential to me and necessary. When I do work, I'm much happier than when I'm unemployed. . . ."
- "...I hate to admit it that. . . there's nothing inside me. Being employed is crucial. I don't know what I'd do without it at this time. Even the job I don't like. I still feel a lot of self-respect and I find meaning in life as a result of having a job. . . ."

While most persons believed that work was of value to them beyond their survival needs, few felt that both in the past or at present, they were simply working to survive:

- "I would say work would only have the value of feeding myself now. It doesn't hold any value to me any longer. I lost that with the illness. I would have had a totally different answer before the illness. I would say work would only have the value of feeding myself now."
- "Living on a sustenance level for many years. Now as a means of self-support."
- "I'm working out of necessity but I've always focused on finding a job that would have been more emotionally satisfying. . . ."

Consumers valued work both for its intrinsic values as well as a financial resource, though they placed a higher value on family and the spiritual values. As indicated by the differences between the rank of employment and the rank of career advancement, consumers did not see employment as being equal with advancing one's career. While consumers worked for intrinsic reasons as well as financial reasons, they were not consumed by a desire for upward mobility. They were trying to achieve a balance among employment, independence, and the non-material aspects of their lives.

Chapter V

Discussion and Conclusions

This section discusses the most important results and puts them into the context of the program outcomes, career development, and characteristics of persons with psychiatric disabilities. Following this discussion, key findings are summarized and conclusions and recommendations based on these results are presented.

Program Success

Vocational Outcomes

The results clearly indicate that the program was successful in helping consumers get and keep employment. This is a most important finding and is in contrast to the generally low success rates for persons with severe psychiatric disabilities. Slightly over 75 percent of the consumers were employed at the time of follow-up; this overall outcome compares very favorably to other vocational programs for persons with psychiatric disabilities. The second encouraging result was that consumers were generally able to continue or obtain employment in professional or semi-professional areas. As with all outcomes, total outcome statistics are the sum and summary of individual outcomes.

The program resulted in considerable changes for many consumers. During program participation, consumers were able to carefully consider vocational dreams as well as vocational realities. From this point, plans were as individual as the consumers who created them. Several consumers decided for less stressful life-styles and changed to occupations with lower stress; for example, a trauma physician moved into microbiology research, and a minister retrained as a pre-school teacher. About half of the New Employment Subgroup (Table 4-6) were unemployed upon program entry. While all of these persons were seeking professional employment, there were considerable differences in the number of hours each wanted to work and in the emphasis on career advancement and upward mobility.

Change in Occupational Decline

Stability was a major characteristic of consumers between leaving the program and data collection for this study. In general, Mainstream returned persons to about the same levels of employment of their last job prior to entering Mainstream. In other words, the program clearly ended the occupational decline for about 75 percent of the consumers. After persons found new jobs or stabilized on their pre-Mainstream jobs, the conditions of employment remained constant during the four follow-up years (Table 4-8). Consumers remained on the same jobs and were satisfied with this situation; they neither experienced nor wanted upward mobility. One vocational characteristic of persons with psychiatric disabilities is a very high turnover rate, therefore the finding of employment stability indicates that persons with this disability can have long-term vocational success and that the Mainstream program was successful for longer than the common follow-up period of 90 or 180 days.

Predictors of Success

General level of functioning was one of the few consistent results found in the study. Mainstream program outcomes were not predicted by any variable other than GAF. Consumers in the study were truly individuals. In developing and operating a program based on consumer choice, Mainstream staff recognized these individual differences and made them the strength of the program. What remains is a successful vocational program based on the goals of consumers and the sensitivity of program staff to develop these goals into competitive employment.

Generalization of Findings

As with any study, a common question centers on whether the results can be generalized beyond the sample of 48 consumers. There are two levels of generalization. The first level is the generalization from Mainstream sample to Mainstream population. In this study we were fortunate to have demographic information on the total number of persons served by the Mainstream program from its beginning to March, 1996. As shown on Table 4-3, there were no significant differences in demographic characteristics between the 48 interviewed consumers and the 187 program participants who were not interviewed. Therefore, it can be safely concluded that the 48 persons in the sample were representative of the 187 persons in the Mainstream program.

The second level of generalization moves from Mainstream participants to professional persons with severe psychiatric disabilities. Can the results of this study be generalized to similar populations? Persons receiving services from Minnesota Mainstream were homogenous in their demographic characteristics. The two most common disabilities were mood disorder and schizophrenia and related. Ethnically, they were white, came from middle-class homes, were in their early 40s upon program entry, and all had at least a bachelor's degree. Many had semi-professional or professional work histories and had achieved some occupational success. Because there were no other functional programs similar to Mainstream at the time of data collection, the literature offers no insights into whether or not this sample represents this sub-population of persons with psychiatric disabilities. However, based on the lack of significant differences between the sample and the total participants in the Minnesota Mainstream program, the results of this study may be tentatively generalized to other persons with the same characteristics.

Individual and/or Subgroup Characteristics

The results are paradoxical. As stated above, both sample and population were very homogenous in their demographic characteristics. Yet within this sample, each consumer was unique in a variety of ways. Consumers differed in values, future plans, employment and educational histories, community integration, support from family and friends, level of functioning, perceptions of themselves, and perceptions of their disabilities.

The focus of Mainstream staff on individual planning, services, and goals emphasized and/or built upon the uniqueness of each person and raised questions about how to research individual experiences that result as individualized programming is pursued.

Data analysis examined various combinations of program and individual consumer variables for possible relationships to outcomes. With the exception of the GAF, no statistically significant relationships were found, and this supports conclusions in the literature that there rarely are variables that consistently predict outcomes. Judging from our own results and the conclusions from the literature review, this lack of statistical significance between predictors and outcomes can be largely attributed to the individual differences. In other words, the individual variations within a defined group commonly exceed differences between groups. Therefore, in serving this population, consumers should not be denied services for any reason, except possibly for functional levels, and services need to be designed to meet the needs of the consumer.

The Minnesota Mainstream Program: What Makes the Program Work

Program Success

Results indicate that the Mainstream program is successful, especially when compared to other employment programs for persons with psychiatric disabilities. However, there is less information about how the program works. The program did not keep records on specific sequences of services or hours in each specific service and relationships between specific service patterns and outcomes.

However, some possible reasons for the success can be suggested: First, the program staff were dedicated to the program ideals and to the consumers. Staff carefully listened to consumers' goals and tried to help the consumers reach their goals. Second, the program was individualized for each consumer. Unlike many programs in which persons proceed through various phases in lock-step, the program fit the needs of the consumer. The most liked service was individualized counseling, which addressed both vocational and personal topics.

Third, the program had the support of Rise, Inc., management. Rise, Inc., has provided services for 25 years and during that time gained a reputation among both the business community and human services providers. The Minnesota Mainstream program built on this reputation. The service, social, and business networks established at the organizational level helped the program gain access to the community. Fourth, the program was staffed by qualified consumers and as staff had a history of psychiatric disability, they were open about that history and were able to quickly establish rapport with the consumers. In addition, all direct service providers were also professionally qualified for their positions. This combination of professional qualifications and disability history contributed greatly to the program's effectiveness.

Mentoring

The final feature was the mentor program, which has attracted the most attention. Mainstream staff attempted to locate a well-respected person in the same profession as the consumer to act as an advisor on career-related issues. However, this aspect of the program was not universally valued, either by mentors or consumers. While consumers liked the concept of a mentor, they were not always pleased with the mentor's performance. Some mentors and consumers had problems defining the role of the mentor. Not all consumers who desired mentors were able to obtain them.

Need for Greater Clarification

The lack of information on individual program services creates a problem for both the Mainstream program and those who would replicate it; yet, the success of this program indicates that it should be replicated elsewhere. For the present, the best approach is for new programs to adopt the admissions criteria, the philosophy of consumer-centered focused planning and services, a genuine respect for the consumers as persons who can decide their own futures, and *qualified* ex-consumers as staff. Services could be provided based on the procedures described in *Working on the Dream* (Lavin & Everett, 1996). The program should be placed in an organization that has the respect of both the business and human service communities and can network within these groups. Finally, while the use of mentors needs to be continued, there is much we do not know about this aspect of the program and therefore it needs additional research.

Career Patterns and Age of Onset Assumption

One of the major purposes of the study was to identify career patterns. There has been little prior research on career patterns for persons with psychiatric disabilities, and what has been accomplished has focused on the age of onset. The present study went beyond this and searched for how age of onset was related to educational, occupational, and mental health histories. This produced five unique career patterns. These results refute the assumption that age of onset is *the* major event in determining a consumer's vocational development.

Perhaps a more accurate measure would be not age of onset, but the age at which the disability begins to seriously interfere with vocational, educational, personal, and social aspects of a person's life. Since most persons do not seek mental health treatment until a crisis situation, the time at which mental health begins to seriously interfere with life activities is difficult to determine. For most consumers in the sample, a gradual onset occurred over a period of several years. Although a decline in employment quality was the main indication for most consumers in the study, a few consumers reported sudden onsets. One consumer reported becoming schizoaffective in a 3-week period during the junior year of college, and another young woman entered a deep depression two months into her freshman college year. Another factor that needs to be considered is the cyclical nature of both mood and thought disabilities. Measures of both job and education histories were not sensitive enough to detect any patterns that may have been caused by cycles in symptoms.

A major pattern revealed in this study was a gradual loss in employment quality and satisfaction prior to entering the Mainstream program. As the number of jobs held increased, consumer's length of time on each job, hourly wage, job satisfaction, and job skill declined. For many consumers this decline occurred over 10 to 15 years; others declined more rapidly, and the number of persons who were unemployed gradually increased over time. A number of consumers also reported problems in their personal lives that corresponded with these professional declines.

What emerges is not a pattern based on age of onset or psychiatric diagnosis, but a gradual decline from employment to unemployment and within employment a decrease in income, skill level, length of time on the job, and status. Consumers sought vocational assistance from Minnesota Mainstream or vocational rehabilitation after years of decline. A number of the consumers interviewed indicated that there was a "vocational crisis" in their lives in which they had become

unemployed, marginally employed, or believed that they needed help to keep their present jobs. Their application for vocational services may or may not have corresponded to a mental health crisis.

This pattern of "decline, crisis, and asking for help" is analogous to the pattern of behavior that accompanies chemical dependency. Please note that we are not saying that all persons with mental illness are substance abusers; all that is implied is an analogy between the two. If we extend this analogy further, then the "recovery process" begins when the consumer begins to profit from the services he/she receives from Mainstream and other sources. There were increases in hours worked weekly and hourly wage between entering the program and the first job after Mainstream services; employment variables either remained constant or increased following services.

Another possible analogy is to view vocational declines and professional assistance as a mid-life crisis. However, this analogy makes a serious mental health problem appear like a part of popular culture and self-help books.

Further, although the five hypothesized patterns were identified, additional research is needed before their validity and, especially, their utility can be determined. A more general finding was a gradual decline in employment, followed by a vocational crisis that led to vocational rehabilitation and related services, and ended with employment.

Consumer Values and Present Living Conditions

Although persons in this study clearly placed their families and religious/spiritual values above all other values, they considered employment to be an activity of considerable importance (Table 4-19). The importance of family and religious/spiritual values may be a reflection of the present social values that have become increasingly popular in the last several years. Three consumers had had formal ties to religious organizations; one was a minister, a second was a lay brother, and the third had been a director of religious education. Many consumers were engaged in organized religious activities such as Bible study, participation in religious ceremonies, and church social activities. Other consumers mentioned being close to either families of origin or their own nuclear family. A few consumers spoke of loss of spouse and children through divorce. Social activities often centered on their families.

Relative Value of Work

After family and religious/spiritual values, consumers valued employment. Working was considered more important than independence and even self-support. Consumers clearly distinguished between employment and career (Table 4-20). While working was rated and considered to be of great value, both as a means of self-support and as a source of emotional satisfaction, career advancement was secondary. Working was seen by consumers as having value, providing an outlet for one's skills and talents, maintaining mental health, and creating a productive member of society. To quote one consumer "Work has a deeper meaning." Another consumer unemployed for a few years said that it felt good to put on a coat and tie and to arrive at work on time.

Comparing Themselves to Peers

There are several possible explanations for the perceived difference between employment and career. Most consumers saw themselves as being behind their peers in career advancement, and many were no longer interested in comparing themselves to their professional peers. Given the downward trend in employment prior to entering Mainstream, many consumers were pleased simply to work at jobs at least partially related to their profession. Also, many of the consumers had been in stressful employment situations prior to entering Mainstream. Such persons could have decided that career advancement was not worth the increased stress. In addition, most consumers lagged behind achievements of their peers and most would never "catch up." This differentiation between job and career may simply reflect reality in their lives. Finally, after having to live with serious mental illness for several years, consumers may have changed their value systems to place greater emphasis on family and religious/spiritual values than on both employment and career advancement.

Community Living

The majority of the consumers were living independently, were employed, and were functioning at a level in which they were capable of maintaining employment. However, working and living independently pushed many to the limits of their present ability to cope. Many persons reported that after work and family, there was little time for social activities, hobbies, or other recreation.

The nature of the relationship between functioning and outcome invites speculation. As consumers become more involved with their mental illness, they spend so much time and effort dealing with these problems that employment becomes a secondary issue. As the employment situation declines, this decline becomes another symptom of the psychiatric disability. Thus, a symptom becomes a separate problem for consumers at a time when coping skills are at their lowest point. Once consumers receive vocational and other assistance, they often begin to regain vocational skills, vocational behaviors, and desire to work. As success becomes more common, persons can function at a higher level. This is a circular relationship in which functioning level feeds vocational behaviors and then improved vocational skills and behaviors improve their general level of functioning.

Disclosure and Mental Health

One of the ongoing debates for persons with psychiatric disabilities and service providers is whether to disclose the disability to employers or potential employers. Gaps in work history and a series of jobs held for short times will indicate a potential problem to any employer. Consumers need to know how to deal with these problems without disclosing mental illness. A counterissue is that disclosure after employment is needed before any reasonable accommodations under the ADA can be requested.

The disclosure of disability affects the type of employment strategy developed by the consumer. Because most consumers did not want a potential employer to know about their disability until after they were hired, consumers made their own initial contacts with employers. Mainstream staff provided few job development services and rarely contacted employers on behalf of consumers.

Consumers were prepared for job seeking; staff did not find the consumer a job.

For each job, consumers were asked if they requested any accommodations or received any support. Prior to entering Mainstream, very little support or accommodations were sought or provided. Consumers simply coped with the job as best they could by themselves, often with negative consequences. Following Mainstream services, consumers more likely to request and receive assistance.

Summary of Study

Although vocational programs for persons with psychiatric disabilities have been provided for over 50 years and the outcomes of these programs have been systematically investigated since the 1960s (see Literature Review), there have been no vocational programs designed to serve persons with psychiatric disabilities who have higher educations and professional careers. Until recently this population was not served in a systematic way. The Minnesota Mainstream program was the first program designed to serve persons with psychiatric disabilities having professional careers (see Results for a description). This consumer-staffed program offers a wide variety of services including individual and group counseling, job-seeking skills, occupational information, placement, mentoring, and follow-up.

The career development literature places little emphasis on disability and its relationship to careers. The consumers involved in Minnesota Mainstream have completed at least a bachelor's degree and most had professional employment, presenting an excellent opportunity to study career development within a tightly defined group.

Research Problems and Questions

This study centered on the issues of evaluating the effectiveness of the Minnesota Mainstream program and describing career development patterns for persons with psychiatric disabilities with higher education.

To determine the effectiveness of Minnesota Mainstream in achieving vocational outcomes for its participants:

1. *What is the Minnesota Mainstream program?*
2. *What are the demographic characteristics of the consumers in the Minnesota Mainstream program?*
3. *What are the vocational outcomes of the Minnesota Mainstream program?*
4. *What are the consumers' present levels of functioning?*

To determine the career patterns among professional persons with psychiatric disabilities:

1. *What were the higher education and employment histories of consumers in the Minnesota Mainstream program?*

2. *Are objective career development patterns identifiable?*
3. *What are the consumers' attitudes and values about employment and having a career?*

Methodology

A Constituency Advisory Committee (CAC) was established to guide all aspects of the study. Based upon the research questions, literature, CAC suggestions, and staff experiences, data collection instruments were developed for the three groups of persons involved in the study. Consumers completed detailed questionnaires of their educational and employment histories prior to a semi-structured interview that commonly lasted for one hour. Mainstream staff were interviewed about program history and procedures. Professional persons in the community advising specific consumers were interviewed about the mentoring process.

Between December, 1989, and March, 1996, Mainstream provided significant services to 187 persons; 48 were involved in the study. The consumers were interviewed by the principal investigator and a trained interviewer. The principal investigator interviewed all staff and mentors. Following data collection, all data were entered into a database and analyzed using SPSSx.

Summary of Results

1. **Participants.** Participants in the study were 60 percent male, almost entirely white, and were in their mid-forties when they entered the Mainstream program. Most consumers came from homes in which the father was employed as a skilled, semi-professional, or professional worker, and the mother was a homemaker. The mean GAF (Global Assessment of Functioning) for the sample was 50.39, at the low-end of the Moderate Range. The two most common primary disabilities were mood or affective disorders (65.6%) and schizophrenia and related (25.0%). The most common secondary disability was another psychiatric disability (e.g., anxiety disorder). The 48 persons in the sample were representative of the 187 persons who received services through the program.
2. **Program satisfaction.** Consumers were generally satisfied with the Minnesota Mainstream program. The program provided a variety of individually based services, the most common and best liked of which were individual and group counseling. Although consumers were moderately satisfied with the services they received, consumers reported problems with the mentoring program (e.g., shortage of mentors).
3. **Higher educational history prior to Mainstream.** The typical consumer attended three colleges. All had completed at least an undergraduate degree, with the median education about two years beyond the bachelor's degree. As the amount of education increased, persons shifted from liberal arts to technical degrees.
4. **Employment history prior to Mainstream.** Employment history prior to entering Mainstream revealed a gradual reduction in the number of years on the job, hourly wage, weeks worked, estimated weekly income, job satisfaction, and skill level required in the job in which they were employed. In general, a change in the type of employer was related to a reduction in job-skill level.

5. **Employment outcomes.** Seventy-seven percent of the consumers were employed after the program; 23 percent were unemployed. Employed persons could be divided into two groups: (a) those with the same job before and after services (27%), and (b) those with new jobs after services (50%). Consumers employed in new jobs returned to their pre-service levels of income, while job-skill level and job satisfaction increased. Most of the 77 percent who were employed worked in skilled, semi-professional, and professional jobs. Income, skill level, and job satisfaction remained constant during the four years following employment. The GAF was the only variable significantly related to employment outcome. Most (82.6%) of the consumers neither asked for nor received any accommodations during employment, and slightly over half of the consumers received support following Mainstream services.
6. **Career patterns.** Based on a preliminary analysis of the data, five career development patterns were hypothesized. A computer program, developed to test for the existence of these five patterns, demonstrated the existence of the following patterns:
 - Career Constant with Post-Formal Educational Disability Onset (Pattern A).*
2 consumers.
 - Career Constant with Pre-Formal Education Completion Disability Onset (Pattern B).*
8 consumers.
 - Career Change with Post-Formal Education Disability Onset (Pattern C).*
11 consumers.
 - Career Change with Pre-Formal Education Completion Disability Onset (Pattern D).*
19 consumers.
 - No Career with Varying Onset (Pattern E).*
7 consumers.
7. **Independent living and housing.** At the time of the interview, most consumers lived independently either alone or with family. Most considered housing to be an affordable expense. The three major sources of support were full-time job, part-time job, and SSDI. Consumers had limited community integration.
8. **Satisfaction with life.** There was no significant difference between consumer satisfaction with life at present and prior to the onset of mental illness. Most consumers considered themselves to be "behind" their peers in career advancement and development. The sample believed that they were managing and coping with mental health issues successfully.
9. **Relative importance of employment.** When rank-ordering values, consumers considered family life and religious/spiritual life to be more important than employment. Employment, self-support, and independent living were close in value. Consumers gave a significantly higher mean rating to "general importance of employment in life" than that given to "satisfaction with career development." Consumers did not see employment as being equal with advancing one's career.
10. **Age of onset.** The age-of-disability onset was related neither to Mainstream program outcomes nor to key events in the consumers' lives.

11. **Type of psychiatric disability.** Two-thirds of the consumers had affective disorders as their primary disabilities. When persons with affective disorders were compared to persons with all other disorders, persons with affective disorders perceived themselves as less able to manage their mental health and less able to cope with their mental health symptoms. No significant relationships were found between type of psychiatric disability and Mainstream outcome and age of onset.

Conclusions

The following conclusions are offered:

1. Because the demographic, educational, and employment variables indicate that the consumers were a homogenous group, the results can only safely be generalized to persons with psychiatric disabilities who have higher education and have at least a skilled or higher work history. In other words, these results are relevant for middle-aged persons with higher educations, from middle-class backgrounds.
2. Because the Minnesota Mainstream program has demonstrated success, it should be carefully replicated by other community-based rehabilitation organizations. Replication efforts need to center on the interpersonal aspects of the program as well as on the specific services provided. Dedicated, qualified staff with personal experience with mental illness are likely a critical element. The effectiveness of these programs needs to be determined, and such future research needs to include records of sequence, types, and amounts of each specific service provided.
3. While the use of mentors shows promise, the results of this study are not conclusive. The role of mentor may be viewed as a slightly formal type of natural support. The purpose, role, selection, and interaction among mentor, consumer, and staff need to more fully understood.
4. Career development for persons with psychiatric disabilities is complex and does not follow the same pattern for all persons. Five different career patterns were empirically identified for the consumers in the study. Because this research was performed on a small sample, investigations of the existence and replicability of career patterns need to be conducted with larger samples drawn from the same population. Although this study found no relationship between career patterns and program outcomes, this too needs additional investigation.
5. Consumers placed a greater emphasis on their families and religious/spiritual values than they did on employment. Also, there was a clear differentiation between employment and career advancement as values; consumers valued employment much more than career advancement.
6. Symptom self-awareness and symptom management are a part of the person's level of functioning. Most consumers had considerable insight into their own mental health, especially symptoms and the management of their symptoms. The possible relationship between self-knowledge of symptoms and vocational outcomes needs to be further studied.

7. One problem repeatedly raised during this study was the lack of consistent prediction of outcomes from demographic, program, or disability-related variables. Based on the positive results of the present study as well as the failure to identify variables (except the GAF) that predict outcomes, future studies of program outcomes should focus on subjective consumer variables, such as the consumer's total value system and where employment fits into that system, consumer's employment patterns, self-image, and desire for achievement.

Recommendations

1. The relative importance of vocational goals to other goals needs to be examined and considered during individual planning and service provision. Vocational goals need to be considered from two perspectives: First, what are the consumer's vocational goals as compared with family and spiritual values? Which of these are the more important and how do consumers place work in their own value system? Some consumers will not see employment as their most important value. Persons in this population appear to be seeking a balance among employment, family, and spiritual values.

Second, there is a difference between employment and career advancement. Programs for this population need to understand the difference between an acceptable level of employment and high-stress career advancement. The desire to work in accordance with one's abilities and skills is not the same as upward mobility.

2. Consumers have a variety of career histories and will have a variety of career goals. While the consumer should be free to consider a variety of occupational areas as goals, the Mainstream experience has been that those consumers remaining either in the same area or a closely related area appear to have a better chance of professional employment.
3. Underlying career goals and the relative importance of these goals is the problem of stress. Excessive stress, either from specific tasks, responsibilities, or personal interaction, tended to result in increased symptoms and lowered functioning. Therefore, consumers and staff need to be aware of the stress factors of specific jobs and be able to realistically judge the long-term effects of this stress on the individual consumer.

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Appendix A

Data Collection Instruments

Minnesota Mainstream
Consumer Questionnaire

Research and Training Center
University of Wisconsin-Stout
Menomonie, Wisconsin 54751

Minnesota Mainstream Consumer Questionnaire

The purpose of this questionnaire is to obtain some background information about consumers who have participated in the Minnesota Mainstream program at Rise, Inc. since 1990. Please complete the questionnaire and bring it to your interview. If you do not know an answer or are confused about how to answer a question, leave that question blank, and we will talk about it at the interview. Please answer each item. However, if you do not want to answer a question because you believe that is a invasion of your privacy, simply write "refuse" in the item.

The information from this questionnaire and the subsequent interview is part of a research study about career development in persons with mental health problems. The results will be used to understand employment and career patterns of persons with mental health problems. This information will also be used to improve vocational programs throughout the country. In addition, the results will be used by Rise, Inc. to improve the Minnesota Mainstream project.

Please note that none of the Rise, Inc. staff will see or have access to this questionnaire and the following interview. The only persons to see or have access to this information will be the Principal Investigator, his associate, and our secretary who enter your responses into the data base. No reports, articles, presentations, etc. will reveal the name or identity of anyone who participated in this study.

Please read the informed consent paper and sign and date it if you want to be in this study. Bring both this completed questionnaire and the signed informed consent to the interview. After the interview, we will pay you \$25.

Identification Information

Name _____ (1)

Mailing Address _____

_____ (2)

City _____ (3) State _____ (4) Zip Code _____ (5)

Do you want a copy of the final report of the study? (6)

☐ Yes (1)

☐ No (2)

Demographic Information

Date of Birth (month) _____ (day) _____ (year) 19 _____ (7)

Current Martial Status (Please check most relevant answer) (8)

- ☐ Single (1)
- ☐ Married (2)
- ☐ Divorced (3)
- ☐ Separated (4)
- ☐ Living with partner (5)

Number and ages of Children living with you: _____ Number _____ Ages (9)

Race/Ethnic Status (Please check the most accurate answer) (10)

- ☐ White (1)
- ☐ Black/African-American (2)
- ☐ American Indian (3)
- ☐ Hispanic (4)
- ☐ Asian/Pacific Islander (5)
- ☐ Other (6)

What is your gender? (11)

- ☐ Male (1)
- ☐ Female (2)

What was your father's occupation while you were in high school? _____ (12)

What was your mother's occupation while you were in high school? _____ (13)

Disability Information

How old were you when your primary mental health disability began (i.e., age of onset). Estimate if necessary.

_____ Years (14)

How old were you when you had your first contact with a mental health professional (e.g., school psychologist, psychiatrist, psychiatric social worker, counselor, or psychologist)? Estimate if necessary.

_____ Years (15)

Do your parents, grandparents, or siblings have a medical history that includes either physical or mental problems? (16)

☐ Yes (1)

☐ No (2)

If "yes," what are (were) the major problems (e.g., diabetes, depression, hypertension)?

_____ (17)

_____ (18)

_____ (19)

Present Living Information

In terms of degrees of support, in what kind of housing do you presently live? (Please check most relevant answer) (20)

☐ Independent housing (no supervision or support) (1)

☐ Living in relative's home (2)

☐ Supported or supervised housing (3)

☐ Foster care (4)

☐ Board and care or board and lodging (5)

☐ Nursing home (6)

☐ Psychiatric hospital (7)

☐ Jail (8)

☐ Transient (9)

☐ Homeless or homeless shelter (10)

☐ Temporary housing (e.g., motel, with a friend) (11)

In terms of ownership, which describes your present housing? (Please check the most relevant answer) (21)

☐ Own or buying a single family or duplex home (1)

☐ Own or buying a townhouse, condo, or mobile home (2)

☐ Renting a single family or duplex home (3)

☐ Renting a townhouse, apartment, or mobile home (4)

☐ Paying rent for supported or supervised housing (5)

☐ None of the above (6)

If you are buying, renting, or paying board, how much is it each month? \$ _____ (22)

About what percentage of your month's income or support goes to pay for rent, mortgage, or board?
_____ % (23)

Do you consider this to be an affordable expense? (24)

☐ Yes (1)

☐ No (2)

With whom do you live? (Please check the most relevant answer) (25)

☐ Alone (self) (1)

☐ Spouse (2)

☐ Spouse and children (3)

☐ Parent(s) (4)

☐ Sibling (5)

☐ Friend (6)

☐ Roommate (7)

☐ Partner or significant other (8)

☐ Other (9)

How long have you lived at your present address? _____ Months (26)

If you are on public housing assistance, what type of subsidy do you have? _____ (27)

How many miles it is from you place of living to your job? _____ Miles (If not presently employed, leave blank) (28).

How do you get from home to work? (29)

☐ Drive own vehicle (1)

☐ Car pool (2)

☐ Walk or ride bicycle (3)

☐ Public transportation (e.g., bus) (4)

☐ Driven by friend, family or spouse (5)

☐ Special transportation (e.g., handicapped transportation) (6)

☐ Other (7)

What are your present sources of income and/or support? Check all that apply (30)

☐ Wages or salary from your own full-time job (1)

☐ Wages or salary from your own part-time job (2)

☐ Social Security Disability Insurance (SSDI) (3)

- ☐ Supplemental Security Income (SSI) (4)
- ☐ General assistance (5)
- ☐ Veterans Administration (VA) disability pension (6)
- ☐ Disability Insurance (7)
- ☐ Supported housing (8)
- ☐ Aid to Families with Dependent Children (AFDC) (9)
- ☐ Family (10)
- ☐ Friends (11)
- ☐ Other (12)

Military History

Have you ever served in any U.S. armed forces? (31)

- ☐ Yes (1)
- ☐ No (2)

If "Yes," please list the following:

Branch of service (e.g., Army, Air Force): _____ (32)

Years of active duty: Year _____ (33) to Year _____ (34)

Grade or rank at time of discharge: _____ (35)

Combat experience (36)

- ☐ Yes (1)
- ☐ No (2)

Educational History

In what year did you graduate from high school? 19 _____ (37)

Were there any mental health problems that interrupted your college education? (38)

- ☐ Yes (1)
- ☐ No (2)

If "Yes," do you remember what year you were in? _____ (39)

If "Yes," do you remember what the problem was? (40)

Were you ever in an educational program for students with mental health disabilities? (41)

☐ Yes (1)

☐ No (2)

If "Yes," do you remember what year(s) you were in? Year _____ (42) to year (43)

Post-High School Education. Below are boxes in which to enter your formal education after leaving high school. Please start with the most recent school you attended and move backwards to the school you attended immediately after high school.

Name of school. Please enter the name of the institution, such as University of Minnesota, Hamline University School of Law, White Bear Lake Technical School, or University of Wisconsin-Madison School of Social Work.

Major or course of study. Please enter your major or course of study. At the undergraduate level, some examples would be chemical engineering, psychology, English, and pre-medicine. At the graduate and professional level some examples would be law, medicine, social work, chemistry, or secondary education. If you attended a technical school, indicate the course of study, such as automobile technology, medical laboratory technician, or graphic design.

Degree, diploma, or certificate. Please enter the degree or certification you received. For example: BA in English, MS in social work, Ph.D. in psychology, J.D (law degree), MD in internal medicine, AA in graphics design, or certification in barbering. If you did not graduate or complete the course, please enter NONE.

Dates attended. Enter the month and year you entered the school and the month and year you left. For example: Sept., 1990 to May, 1995; Aug. 1986 to July, 1989. If you left before completion, enter the last month you attended.

Most Recent Educational Institution Attended

Name of school _____ (44)

Major or course of study _____ (45)

Degree, diploma, or certificate _____ (46)

Dates Attended: Starting Date _____ (47)
Month Year

Completion or ending date _____ (48)
Month Year

Next Most Recent Educational Institution Attended

Name of school _____ (49)

Major or course of study _____ (50)

Degree, diploma, or certificate _____ (51)

Dates Attended: Starting Date _____ (52)
Month Year

Completion or ending date _____ (53)
Month Year

Next Most Recent Educational Institution Attended

Name of school _____ (54)

Major or course of study _____ (55)

Degree, diploma, or certificate _____ (56)

Dates Attended: Starting Date _____ (57)
Month Year

Completion or ending date _____ (58)
Month Year

Next Most Recent Educational Institution Attended

Name of school _____ (59)

Major or course of study _____ (60)

Degree, diploma, or certificate _____ (61)

Dates Attended: Starting Date _____ (62)
Month Year

Completion or ending date _____ (63)
Month Year

Next Most Recent Educational Institution Attended

Name of school _____ (64)

Major or course of study _____ (65)

Degree, diploma, or certificate _____ (66)

Dates Attended: Starting Date _____ (67)
Month Year

Completion or ending date _____ (68)
Month Year

Next Most Recent Educational Institution Attended

Name of school _____ (69)

Major or course of study _____ (70)

Degree, diploma, or certificate _____ (71)

Dates Attended: Starting Date _____ (72)
Month Year

Completion or ending date _____ (73)
Month Year

Employment History

Please enter your employment history starting with the most recent job or the job you have now including the job(s) held and secured during your time with Minnesota Mainstream and go backwards to the job you had immediately after completing undergraduate school or technical school. If you held two jobs at the same time, record both of these jobs. If you held a number of similar jobs for only a few months, group and average these together (e.g., waiter at Dunn's, Caribou, Starbuck's coffee shops).

Job title. The name of the job as it was (is) known to the employer, such as art teacher, accountant, psychiatric social worker, or supervisor of works.

Employer. The name of the employer. Please list the company: Ford Motor Company, University of Minnesota, Perkins Restaurant, or H and R Block. If you were self-employed, enter "self-employed." If you were employed in sheltered or other noncompetitive employment, indicate this and record the name of the agency who employed you.

Brief job description. A one sentence summary on the major job duties or the purpose of the job. For example: "Teach artistic expression using a variety of media to children in elementary school."

Approximate dates worked. Record the month and year you started on this job and the month and year that you quit. If you are still employed, write "still employed" for the month and year.

Final hourly wage or salary. If you were paid hourly, enter the hourly wage, such as \$9.89 per hour or \$12.00 per hour. If you were salaried, record the amount paid per week or per month, such as \$500.00 per week, or \$2,500.00 per month.

Number of hours worked in a typical week. Write in the average hours that you worked per week: 40 hours, 24 hours, or 60 hours. If you cannot recall the number of hours, write in "full-time" if you worked **more** than 30 hours per week or "part-time" if you worked **less** than 30 hours per week.

Reason left job. Record the major reason why you left this job. This could include a wide variety of reasons from "getting another job," to "returned to school," to "laid off," to "quit for mental health reasons." If you are still employed, enter "not applicable."

Were any accommodations made? Did your employer make any special arrangements for you to accomplish the job because of mental or physical disabilities. Some examples are working part-time, longer lunch hours, traded tasks with other employees, redesigned work station to match a physical disability, and make telephone calls to support persons.

What types of support, if any, were provided? Here we mean training and emotional support from professional rehabilitation service providers; after work hours employment

support groups; support from co-workers, supervisors, or mentor; and support from family and friends.

How did you get this job? Check the most relevant response.

1. Competitive job listing: newspaper ads, employment service, etc. announcing a position to the general public.
2. Mentor or networking: Location of job with considerable assistance by mentor or other sources.
3. Minnesota Mainstream materials: Employers willing to hire or actively seek applicants as a result of MM publicity.
4. Direct Placement: Located job by oneself with minimum support from Minnesota Mainstream.
5. Updating education career track: Located employment following or as a result of upgrading job skills through training or education.
6. Self-employed: Started own company or continued to remain self-employed.
7. Other: Any other means of obtaining employment not listed above.

Satisfaction Rating. Please rate your overall satisfaction for each job you held.

Job title _____ (74)

Employer _____ (75)

Brief description of job _____

(76)

Approximate dates worked: From _____ (77) To _____ (78)
Month Year Month Year

Final hourly wage or salary \$ _____ (79)

Number of hours worked in a typical week _____ (80)

Reason left job _____ (81)

Were any accommodations requested or made? _____

(82)

What type of support, if any, was provided? _____

(83)

How did you get this job? (check only one) (84)

☐ Competitive job listings (1)

☐ Mentor or networking (2)

☐ Minnesota Mainstream Materials (3)

☐ Direct Placement (4)

☐ Updating education career track (5)

☐ Self-employed (6)

☐ Other (7)

In general, how satisfied are (were) you with this job? (85)

Terrible	☐	☐	☐	☐	☐	☐	☐	Delighted
	1	2	3	4	5	6	7	
	Terrible	Unhappy	Mostly Dissatisfied	Mixed	Mostly Satisfied	Pleased	Delighted	

BEST COPY AVAILABLE

Job title _____ (86)

Employer _____ (87)

Brief description of job _____

(88)

Approximate dates worked: From _____ (89) To _____ (90)
Month Year Month Year

Final hourly wage or salary \$ _____ (91)

Number of hours worked in a typical week _____ (92)

Reason left job _____ (93)

Were any accommodations requested or made? _____

(94)

What type of support, if any, was provided? _____

(95)

How did you get this job? (check only one) (96)

☐ Competitive job listings (1)

☐ Mentor or networking (2)

☐ Minnesota Mainstream Materials (3)

☐ Direct Placement (4)

☐ Updating education career track (5)

☐ Self-employed (6)

☐ Other (7)

In general, how satisfied are (were) you with this job? (97)

Terrible	☐	☐	☐	☐	☐	☐	☐	Delighted
	1	2	3	4	5	6	7	
	Terrible	Unhappy	Mostly	Mixed	Mostly	Pleased	Delighted	
			Dissatisfied		Satisfied			

Job title _____ (98)

Employer _____ (99)

Brief description of job _____

_____ (100)

Approximate dates worked: From _____ (101) To _____ (102)
Month Year Month Year

Final hourly wage or salary \$ _____ (103)

Number of hours worked in a typical week _____ (104)

Reason left job _____ (105)

Were any accommodations requested or made? _____

_____ (106)

What type of support, if any, was provided? _____

_____ (107)

How did you get this job? (check only one) (108)

☐ Competitive job listings (1)

☐ Mentor or networking (2)

☐ Minnesota Mainstream Materials (3)

☐ Direct Placement (4)

☐ Updating education career track (5)

☐ Self-employed (6)

☐ Other (7)

In general, how satisfied are (were) you with this job? (109)

Terrible

☐

1

☐

2

Unhappy

☐

3

Mostly
Dissatisfied

☐

4

Mixed

☐

5

Mostly
Satisfied

☐

6

Pleased

☐

7

Delighted

Delighted

Job title _____ (110)

Employer _____ (111)

Brief description of job _____

_____ (112)

Approximate dates worked: From _____ (113) To _____ (114)
Month Year Month Year

Final hourly wage or salary \$ _____ (115)

Number of hours worked in a typical week _____ (116)

Reason left job _____ (117)

Were any accommodations requested or made? _____

_____ (118)

What type of support, if any, was provided? _____
_____ (119)

How did you get this job? (check only one) (120)

- | | |
|---|--|
| ☐ Competitive job listings (1) | ☐ Updating education career track (5) |
| ☐ Mentor or networking (2) | ☐ Self-employed (6) |
| ☐ Minnesota Mainstream Materials (3) | ☐ Other (7) |
| ☐ Direct Placement (4) | |

In general, how satisfied are (were) you with this job? (121)

Terrible	☐	☐	☐	☐	☐	☐	☐	Delighted
	1	2	3	4	5	6	7	
	Terrible	Unhappy	Mostly	Mixed	Mostly	Pleased	Delighted	
			Dissatisfied		Satisfied			

Job title _____ (122)

Employer _____ (123)

Brief description of job _____

_____ (124)

Approximate dates worked: From _____ (125) To _____ (126)
Month Year Month Year

Final hourly wage or salary \$ _____ (127)

Number of hours worked in a typical week _____ (128)

Reason left job _____ (129)

Were any accommodations requested or made? _____

_____ (130)

What type of support, if any, was provided? _____
_____ (131)

How did you get this job? (check only one) (132)

- | | |
|---|--|
| ☐ Competitive job listings (1) | ☐ Updating education career track (5) |
| ☐ Mentor or networking (2) | ☐ Self-employed (6) |
| ☐ Minnesota Mainstream Materials (3) | ☐ Other (7) |
| ☐ Direct Placement (4) | |

In general, how satisfied are (were) you with this job? (133)

Terrible	☐	☐	☐	☐	☐	☐	☐	Delighted
	1	2	3	4	5	6	7	
Terrible	Unhappy	Mostly	Mixed	Mostly	Pleased	Delighted		
		Dissatisfied		Satisfied				

Job title _____ (134)

Employer _____ (135)

Brief description of job _____

(136)

Approximate dates worked: From _____ (137) To _____ (138)
Month Year Month Year

Final hourly wage or salary \$ _____ (139)

Number of hours worked in a typical week _____ (140)

Reason left job _____ (141)

Were any accommodations requested or made? _____

(142)

What type of support, if any, was provided? _____

(143)

How did you get this job? (check only one) (144)

- | | |
|---|--|
| ☐ Competitive job listings (1) | ☐ Updating education career track (5) |
| ☐ Mentor or networking (2) | ☐ Self-employed (6) |
| ☐ Minnesota Mainstream Materials (3) | ☐ Other (7) |
| ☐ Direct Placement (4) | |

In general, how satisfied are (were) you with this job? (145)

Terrible	☐	☐	☐	☐	☐	☐	☐	Delighted
	1	2	3	4	5	6	7	
	Terrible	Unhappy	Mostly	Mixed	Mostly	Pleased	Delighted	
			Dissatisfied		Satisfied			

Thank you for completing this questionnaire. Please bring it along to your interview at RISE. Your interview is scheduled at

Place: _____ _____
Date: _____
Time: _____

If you want to contact us prior to the interview, my address and phone number is below:

Karl Botterbusch, Ph.D.
Research and Training Center
University of Wisconsin-Stout
Menomonie, WI 54751
Phone: (715) 232-1464 TTY: (715) 232-5025 Fax: (715) 232-2251
E-Mail: BOTTERBUSCHK@UWSTOUT.EDU

or

Judith Axel or Nancy Stearns
Minnesota Mainstream
Rise, Inc.
8406 Sunset Road NE
Spring Lake Park, MN 55432
Phone: (612) 786-8334 TTY: (612) 786-8334 Fax: (612) 786-0008

Minnesota Mainstream

Consumer Interview Protocol

Research and Training Center
University of Wisconsin-Stout
Menomonie, Wisconsin 54751

Consumer's Name _____ *Code* _____

Interviewer _____ *Date* _____

Minnesota Mainstream Consumer Interview Protocol

Before Starting the Interview

Greet consumer, thank him/her for coming, and ask him/her to be seated.

Introduce self and give the consumer a brief explanation of the project.

Take the voluntary informed consent form from consumer, ask if consumer has any questions, and check to see if form is signed and dated. Remind consumer that this consent form includes three sources of information: the Minnesota Mainstream Consumer Questionnaire, the interview, and a review of the consumer's file, if needed. However, we anticipate that this source will be used infrequently.

Answer any questions about consent form.

Review Minnesota Mainstream Consumer Questionnaire and look for missing information. Ask consumer if he/she has questions about the questionnaire or needs any additional instructions. If necessary, review questionnaire with the consumer and make any changes as necessary.

Ask if consumer is ready to go ahead with the interview. Explain that you will be taping this interview. Explain that the answers on the tapes will only be used as a data source. The consumer will remain anonymous. The tapes will be destroyed after the responses have been coded. If consumer objects to being taped, DO NOT TAPE. Continue by taking notes and quotes from the consumer.

Check to see if tape recorder has tape, counter is set to "0."

When consumer is comfortable and ready to begin, start the tape recorder, enter identification information, and ask the first question.

During the Interview

Make general notes on this protocol and record the recorder counter number each time you ask a new question. Have the consumer rate or rank the items indicated on this protocol.

If the consumer appears to be nervous or anxious during the interview, ask him/her if they would like to take a short break. Stop recorder and allow the consumer time to get a drink, stretch, etc. before continuing the interview. Turn the tape recorder on when the interview continues.

Counter &
Start Time

Counter_____

Time_____

1. Please tell me about your present or most recent job. (Refer to questionnaire.)

- a. How do you like your job? Do you like the tasks and duties? Do you like the people you work with? If so, why?
- b. What don't you like about this job, and how would you like to see it improved?
- c. How does this job fit into your career plans? How will it contribute to your career growth?
- d. How did you get this job?
- e. (Show consumer Likert scale for Item 1.e. Happy on Present Job. Ask him/her to make the most appropriate response)

Counter &
Elapsed Time

Counter_____

Time_____

2. Please tell me about the Minnesota Mainstream program.

- a. How did you first hear about the program and how did you become involved in it?
- b. Who provided funding for the program?
- c. What specific services did you participate in? Were any of these especially helpful? (Present the consumer Item 2.c. Services and ask him/her to rank the services in order of importance 1 = most important.)
- d. Did you change career goals? If so, how did you do this?
- e. The use of mentors is one of the unique features in the Minnesota Mainstream program. When you were in the program, did you have a mentor? If you did, please tell me about your direct experiences with mentors. What exactly did your mentor do that helped in career exploration and finding a job?
- f. (Show consumer Likert scale for Item 2.f. Satisfaction with Mentor. Ask him/her to make the most appropriate response)

- 129

Counter &
Elapsed Time

Counter_____

Time_____

3. Although we have some information from the questionnaire that you just completed, please tell me a little more about how things are going for you at present.

- a. If you are not presently employed for pay, what are you doing (school or training, volunteer work, homemaker, or searching for a job)? Are you unable to work at present?

- b. Are you involved in the community? Do you have friends you do things with? Are you in any organizations?

- c. In terms of career growth, how do you compare yourself with other people of about the same age and with the same type of education as yourself?

- d. How satisfied are you with your life at present? If you could change your life, how would you change it?

- e. (Show consumer Likert scale for Item 3.e., Satisfied with Life. Ask him/her to make the most appropriate response.)

Counter &
Elapsed Time

Counter_____

Time_____

4. Please answer a few questions about life before the onset of your mental health problem?

- a. What were your career dreams, goals, and plans prior to the onset of your problem?
- b. Where and how well were you living and how much independence did you have?
- c. Were you involved in any organizations, informal groups, clubs, sports, or other activities during this time?
- d. (Show consumer Likert scale for Item 4.f. Life before Mental Illness. Ask him/her to make the most appropriate response.)

Counter &
Elapsed Time

Counter _____

Time _____

5. Has your disability affected your career development? If it has, please tell me how?

- a. Did it effect your education? Such as, where and when you went to school?
- b. Has it effected the type of jobs (such as skill level, occupational areas, length of time employed) that you have held?
- c. Have you had to change careers because of your disability?
- d. Have you lost any jobs because of your disability?
- e. (Show consumer Likert scale for Item 5.e. Career Development. Ask him/her to make the most appropriate response)

Counter &
Elapsed Time

Counter_____

Time_____

6. What does being employed mean to you?

- a. Do you see work mainly as a means of supporting yourself, or does have other meanings?

- b. What are the most important aspects of your life? (Show consumer Likert for 6.b. Rank Major Aspects of Life. Have consumer rank aspects of his/her life?)

- c. (Show consumer Likert scale for Item 6. c. How Important to be Employed. Ask him/her to make the most appropriate response)

Counter &
Elapsed Time

Counter_____

Time_____

7. What personal qualities do you have that have helped you in career development?

- a. Intelligence and aptitudes?
- b. Personality, social skills, and ability to interact with others?
- c. Encouragement and support from family and friends?
- d. (Show consumer Likert scale for Item 7.d. Personal Qualities. Ask him/her to make the most appropriate response)

Counter &
Elapsed Time

Counter_____

Time_____

8. The last part of this interview asks about your present psychiatric disability(ies).

- a. What is your current primary mental health diagnosis disability(ies)? Please be as specific as possible. What was (were) the approximate date(s) of this diagnosis?
- b. Do you have any co-existing disabilities (also called secondary disabilities) such as arthritis, hearing loss, and substance abuse?
- c. Are you presently taking any psychotropic (i.e., mood altering medicine) medicine?
☐ Yes (1)
☐ No (2)
If "yes," what medications?

- d. What symptoms or other problems do you experience as a result of your mental health disability?
- e. Are you able to tell (or self-identify) when you are becoming dysfunctional from your mental illness?

- f. (Show consumer Likert scale for Item 8.f. Present Management of Mental Health Condition. Ask him/her to make the most appropriate response)

- g. (Show consumer Likert scale for Item 8.g. Cope with Mental Health Problems. Ask him/her to make the most appropriate response)

After the Interview

Review notes and scales with consumer and ask if he/she has any questions.

Make certain the identifying information is on both this protocol and on the rating scales.

Staple the scales to this interview protocol.

Thank the consumer for participating.

Pay consumer \$25 and have him/her sign receipt.

Place the Interview, Consent Form, Questionnaire, audio tape, and receipt in an envelope and record the consumer's name and identification number on the outside. Place this envelope in a secure place.

Karl Botterbusch, Ph.D.
Research and Training Center
University of Wisconsin-Stout
Menomonie, WI 54751

***Minnesota Mainstream
Consumer Interview Protocol
Rating and Ranking Supplement***

**Research and Training Center
University of Wisconsin-Stout
Menomonie, Wisconsin 54751**

Consumer's Name _____ *Code* _____

Interviewer _____ *Date* _____

Consumer Interview Protocol: Rating and Ranking Supplement

1.e. **In general, how happy are you with your present or most recent job?**

Terrible	☐	☐	☐	☐	☐	☐	☐	Delighted
	1	2	3	4	5	6	7	
	Terrible	Unhappy	Mostly	Mixed	Mostly	Pleased	Delighted	
			Dissatisfied		Satisfied			

☐ **Not employed.**

2.c. **Please rank the services you received from Minnesota Mainstream in terms of their value or importance to you. (The most important should be ranked "1".)**

- ☐ Group
- ☐ Mentor program
- ☐ Resume or interviewing classes
- ☐ Individual help
- ☐ Exploration of career field with staff or on own.
- ☐ Other

- 2 -

2.f. **How satisfied were you with the help you got from your mentor?**

Terrible	☐	☐	☐	☐	☐	☐	☐	Delighted
	1	2	3	4	5	6	7	
	Terrible	Unhappy	Mostly	Mixed	Mostly	Pleased	Delighted	
			Dissatisfied		Satisfied			

☐ **No mentor.**

2.h. **In general, how satisfied were you with the services you received from Minnesota Mainstream?**

Terrible	☐	☐	☐	☐	☐	☐	☐	Delighted
	1	2	3	4	5	6	7	
	Terrible	Unhappy	Mostly	Mixed	Mostly	Pleased	Delighted	
			Dissatisfied		Satisfied			

☐ **No significant services.**

- 4 -

3.e. **How satisfied are you with your life at this time?**

Terrible	☐	☐	☐	☐	☐	☐	☐	Delighted
	1	2	3	4	5	6	7	
	Terrible	Unhappy	Mostly	Mixed	Mostly	Pleased	Delighted	
			Dissatisfied		Satisfied			

- 5 -

- 4.d. **How satisfied were you with your life before mental health problems began to interfere with it?**

Terrible	☐	☐	☐	☐	☐	☐	☐	Delighted
	1	2	3	4	5	6	7	
	Terrible	Unhappy	Mostly Dissatisfied	Mixed	Mostly Satisfied	Pleased	Delighted	

- 6 -

- 5.e. **In general, how satisfied have you been with your career development?**

Terrible	☐	☐	☐	☐	☐	☐	☐	Delighted
	1	2	3	4	5	6	7	
	Terrible	Unhappy	Mostly Dissatisfied	Mixed	Mostly Satisfied	Pleased	Delighted	

6.b. **Please rank the major aspects in your life in terms of their value or importance to you. (The most important should be ranked "1".)**

- ☐ Family
- ☐ Recreation
- ☐ Education
- ☐ Spiritual or religious
- ☐ Career advancement
- ☐ Employment
- ☐ Support self, whether working or not
- ☐ Hobbies
- ☐ Maintain independence in living
- ☐ Other

- 8 -

6.c. **How important is it to you to be employed?**

Not	☐	☐	☐	☐	☐	☐	☐	Important
Important	1	2	3	4	5	6	7	
	Extremely	Consid- able	Slightly	Mixed	Slightly	Consid- able	Extremely	

- 7.d. **How satisfied are you with the personal qualities that you can bring to a job or career?**

Terrible	☐	☐	☐	☐	☐	☐	☐	Delighted
	1	2	3	4	5	6	7	
	Terrible	Unhappy	Mostly	Mixed	Mostly	Pleased	Delighted	
		Dissatisfied			Satisfied			

- 10 -

- 8.f. **How well do you feel that you are managing your present mental health condition?**

Terrible	☐	☐	☐	☐	☐	☐	☐	Delighted
	1	2	3	4	5	6	7	
	Terrible	Unhappy	Mostly	Mixed	Mostly	Pleased	Delighted	
		Dissatisfied		Satisfied				

8.g. **About what percent of the time do you feel that you can cope with your mental health problems?**

☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
0	10	20	30	40	50	60	70	80	90	100
Percent of Time										

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Menomonie, WI 54751

Minnesota Mainstream

Mentor Interview Protocol

Research and Training Center
University of Wisconsin-Stout
Menomonie, Wisconsin 54751

Minnesota Mainstream Mentor Interview Protocol

Before Starting the Interview

Before the interview, write the mentor's name, identification number, and date on the audio cassette label.

Prior to the interview enter the mentor's and interviewer's identification on this protocol.

Introduce yourself and explain the purpose of the study.

Thank the mentor for this interview and explain that it will not take more than 30 minutes.

Review the voluntary informed consent form, answering any questions that he/she may have. Make certain that it has been signed and dated. Explain that the mentor will not be individually identified, nor will any material be prepared that will identify him/her as a mentor. The mentor will not be linked with the consumer (i.e., protégé) that he/she has mentored. We are not trying to determine how effective each mentor was with a specific consumer. We are trying to determine how mentors and protégés work together and interact.

Ask the mentor if he/she has any questions before you start. Show the mentor the identification information on this protocol and find out if there are any corrections or additions.

Ask if you can tape the interview. If the mentor objects, DO NOT TAPE. Continue the interview by taking notes of the conversation.

Check to see if the tape recorder has tape and the counter is set to "0."

When the mentor is comfortable and ready to begin, start the tape recorder and ask the first question.

During the Interview

Take general notes on this protocol and record the recorder counter number each time you ask a question in a new section.

Mentor's Name _____ *Mentor Code* _____

Interviewer _____ *Date of Interview* _____

Mentor's Name _____

Business Address _____

City _____ State _____ Zip Code _____

Telephone Number _____

Mentor's Profession/Occupation _____

Demographic Information:

Gender

☐ Male

☐ Female

Age _____

Education _____

Years in your profession _____

Does the mentor want a copy of the final report?

☐ Yes

☐ No

If yes, ask if the mentor wants it sent to the above address or another address:

Counter &
Start Time

Counter_____

Time_____

1. Please tell me a little about your profession.

- a. What are the usual entry and career ladder requirements in terms of education, experience, and/or certification?

- b. What are the unique characteristics of your profession? That is, what separates your occupational area from other similar occupations?

- c. Does your occupation have a trade or professional organization? Have you used local chapters to help find jobs, hire persons yourself, or fill some temporary work positions?

- d. What are the typical patterns of advancement?

Counter &
Elapsed Time

Counter_____

Time_____

2. This next series of questions relates specifically to the Minnesota Mainstream program.

- a. How did you get involved with the Minnesota Mainstream program as a mentor?
- b. Who initially contacted you and why did they select you?
- c. What motivated you to get involved? What did you get from this relationship?
- d. How did you go about the mentoring process?
- e. How was the communication between you, your protégé, and Minnesota Mainstream staff?
- f. What suggestions do you have for the Minnesota Mainstream staff on how they can improve the mentoring program?

Counter &
Elapsed Time

Counter_____

Time_____

3. How did you go about mentoring with the person(s) you helped?

- a. How did you go about your mentoring process?

- b. What exactly did you do for him/her (e.g., emotional support, job leads)? What did he/she do for you?

- c. Did you use your professional and other social networks to help the consumer? What networks did you use and how effective were they in helping the protégé to get and keep professional employment?

- d. Was your mentoring experience worthwhile for both you and your protégé? What elements made it worthwhile for both you and your protégé?

- e. How successful in finding and keeping a job was your protégé? What do you contribute this success to? How effective do you think your efforts were?

Counter &
Elapsed Time

Counter_____

Time_____

4. Please tell me a little bit about yourself.

- a. Can you briefly tell me about your employment history in this or related professions?

- b. Are you active in professional organizations or related societies?

- c. In general, are you happy with your occupational choice? Would you recommend your profession/occupation to young persons who are planning their careers?

- d. What advice would you give to someone who wants to become a mentor? Is there any other information that I overlooked?

After the interview

Review answers with the mentor and ask him/her if there is anything that you overlooked or did not write down correctly. Make changes as necessary.

Turn off tape recorder. Make certain that mentor's name, code number, and the date of the interview is on the label.

Thank the mentor and leave.

Karl Botterbusch, Ph.D.
Research and Training Center
University of Wisconsin-Stout
Menomonie, WI 54751

Minnesota Mainstream

Staff Interview

**Research and Training Center
University of Wisconsin-Stout
Menomonie, Wisconsin 54751**

Minnesota Mainstream Staff Interview

Before Starting the Interview

Write the counselor's name and interview date on the audio cassette label. Write the counselor's name and interview date on this form.

Review the voluntary informed consent form, answering any questions that he/she may have. Make certain that it has been signed and dated. Explain that the counselor will not be individually identified, nor will any material be prepared that identifies a specific counselor with a mentor or consumer. The counselor will not be linked with the consumers that he/she has provided services to. We are not trying to determine how effective each counselor was with a specific consumer or with a specific mentor. We are trying to determine how counselors, consumers, and mentors work together and in part, interact.

Ask staff person if he/she has any questions before you start.

Ask if you can tape the interview. If the person objects, DO NOT TAPE. Continue the interview by taking notes of the conversation.

Check to see if the tape recorder has tape and the counter is set to "0."

When the staff person is comfortable and ready to begin, start the tape recorder and ask the first question.

During the Interview

Take general notes on this protocol and record the recorder counter number each time you ask a question in a new section.

Staff Person's Name _____

Interviewer _____ *Date* _____

Counter &
Start Time

Counter_____

Time_____

1. This first series of questions centers on the Minnesota Mainstream program.

- a.. What do you see as the overall purpose of Minnesota Mainstream? In other words, what are the goals?
- b. How are consumers referred to the program? What are the most common referral sources?
- c. What specific services are offered by the program? What are the most common services?
- d. What services do you regularly find the most important?
- e. How does the program currently operate? Please take a typical consumer and trace his/her steps from the time he/she enters the program until he/she have completed the program.

- f. If the consumer fails on a job, can he/she re-enter the program and receive additional services?
Does Minnesota Mainstream have open entry/open exit policy?
- g. What are some common consumer employment goals?
- h. How much emphasis, if any, does the program place on independent living and community integration?
- i. What are some of the typical program outcomes?
- j. What are the most common funding mechanisms?
- k. What are the major changes in the Minnesota Mainstream program since you started working on this project? What were the reasons for these changes?

Counter &
Elapsed Time

Counter_____

Time_____

2. The Minnesota Mainstream Program is well known for the use of mentors. This next series of questions centers on mentors.

- a. How does one become a mentor and what do you look for when selecting a mentor?

- b. What are a mentor's responsibilities to consumers and Minnesota Mainstream staff? What are the staff and consumer obligations to the mentor?

- c. How do you define or determine if a mentor is successful or not? In other words, what constitutes successful performance?

- d. Have any liability issues arisen? Have any questions arisen about RISE's liability or the mentor's liability

Counter &
Elapsed Time

Counter_____

Time_____

3. This next series of questions centers on the consumer's participation in the program.

- a. How much choice does the consumer have in planning his/her vocational goals?
- b. What kinds of career information are provided to the consumer on the local labor market, on specific occupations, and alternative careers?
- c. How does the program deal with consumers who change career goals after exposure to career information and the labor market?
- d. How does someone re-enter the program? Does this occur often? How often and under what circumstances would this occur?

Counter &
Elapsed Time

Counter_____

Time_____

4. The last several questions centers on your position as a service provider in Minnesota Mainstream.

- a. What size is your present case load?
- b. What do you like best about your job?
- c. What do you like least about your job?
- d. Is there anything else that you would like to add?

After the interview

Review answers with the staff person and ask him/her if there is anything that you overlooked or did not write down correctly. Make changes as necessary.

Turn off tape recorder. Make certain that the person's name, and the date of the interview is on the label.

Thank the staff person.

Karl Botterbusch, Ph.D.
Research and Training Center
University of Wisconsin-Stout
Menomonie, WI 54751

Appendix B

Informed Consent Forms

Minnesota Mainstream Career Study Consumer Informed Consent Form

The Research and Training Center at the University of Wisconsin-Stout and the Minnesota Mainstream project at Rise, Inc. are investigating career development and vocational outcomes for persons who were involved in the Minnesota Mainstream project between its start in 1989 and March 1, 1996. About 190 persons received services from Minnesota Mainstream during these six years; we have selected a random sample of 100 persons who we would like to complete a questionnaire and a subsequent interview. You have been randomly selected as part of our sample. Your help is needed to investigate the following research questions:

How is the Minnesota Mainstream being delivered and what does it mean to be a consumer-run program?

What was (is) the role of the Minnesota Mainstream program to consumers and its direct value to them? What is seen as important in the mentoring process; consumer perceptions about career development, and educational and vocational history; the effects of psychiatric disability on careers; and what are critical vocational and educational incidents?

What are the outcomes are achieved by consumers as a result of the program?

We plan to investigate these questions by obtaining information from three groups: persons who participated in the program, mentors, and the Minnesota Mainstream staff who provide direct services.

Participation involves the completion of the enclosed questionnaire and of an interview. We expect that each will take about one hour of your time. We do not anticipate that this study will present any social, mental health, or physical risk to you. However, we plan to audiotape the interview if you grant us permission. In some cases we may have to look in your file at Minnesota Mainstream. The interview will be scheduled at your convenience and will occur either at Rise in Spring Lake Park or at Rise on Central Avenue in Minneapolis.

The information from this questionnaire and the subsequent interview is part of a research study about career development in persons with mental health problems. The results will be used to understand employment and career patterns of persons with mental health problems. This information will also be used to improve vocational programs throughout the country. In addition, the results will be used by Rise, Inc. to improve the Minnesota Mainstream project. Please note that none of the Rise, Inc. staff will see or have access to the attached questionnaire and the following interview. The only persons to see or have access to this information will be the Principal Investigator, his associate, and our secretary at the University of Wisconsin-Stout who enters your responses into the database. No reports, articles, presentations, etc. will reveal the name or identity of anyone who participated in this study.

If you want to withdraw from this study at any time, you may do so without any adverse consequences. All information collected from you will then be destroyed if you so desire.

If you have any questions, please contact:

Ms. Nancy Stearns Minnesota Mainstream Rise, Inc. 8406 Sunset Road NE Spring Lake Park, MN 55432-1387 Phone: (612) 786-8334	Dr. Karl Botterbusch, Ph.D. Research and Training Center University of Wisconsin-Stout Menomonie, WI 54751 Phone: (715) 232-1464 e-mail: BOTTERBUSCHK@UWSTOUT.EDU
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Complaints about your treatment as a participant in this study should be made in writing to the following:

Chair
Institutional Review Board for the Protection of Human Subjects
Office of Research Promotions
University of Wisconsin-Stout
Menomonie, WI 54751

Bring both the questionnaire and this informed consent to the interview. After the interview we will pay you \$25.00.

I have read and understand the above explanation of this study and my rights and responsibilities.

☐ I agree to participate. ☐ I do not wish to participate.

Name Date

Witness Date

This research has been approved by the University of Wisconsin-Stout
Institutional Review Board for the Protection of Human Subjects.

Minnesota Mainstream Career Study Mentor Informed Consent Form

The Research and Training Center at the University of Wisconsin-Stout and the Minnesota Mainstream project at Rise, Inc. are investigating career development and vocational outcomes for persons with mental illness who were involved in the Minnesota Mainstream project between its start in 1989 and March 1, 1996. Because one of the unique features of this program is its continued use of mentors as advisors for persons with mental health problems, part of our research centers on the use of mentors. We want to determine the role of mentors as seen by the mentor themselves, what mentors do, and how the relationship between mentor and protégé is developed and maintained. In order to answer these questions, we have developed a short interview protocol.

Participation involves an interview that will take about 30 minutes of your time. We do not anticipate that this study will present any social, mental health, or physical risk to you. However, we plan to audiotape the interview if you grant us permission. The interview will be scheduled at a time and place chosen by you.

The information obtained from the interview is part of a research study about career development in persons with mental health problems. The results will be used to understand employment and career patterns of persons with mental health problems. This information will also be used to improve vocational programs throughout the country. In addition, the results will be used by RISE, Inc. to improve the Minnesota Mainstream project.

None of the Rise, Inc. staff will see or have access to the interview. The only persons to see or have access to this information will be the Principal Investigator and his secretary at the University of Wisconsin-Stout who enters your responses into the data base. No reports, articles, presentations, etc. will reveal the name or identity of anyone who participated in this study.

If you want to withdraw from this study at any time, you may do so without any adverse consequences. All information collected from you will then be destroyed if you so desire.

If you have any questions, please contact:

Ms. Nancy Stearns Minnesota Mainstream Rise, Inc. 8406 Sunset Road NE Spring Lake Park, MN 55432-1387 Phone: (612) 786-8334	Dr. Karl Botterbusch, Ph.D. Research and Training Center University of Wisconsin-Stout Menomonie, WI 54751 Phone: (715) 232-1464 e-mail: BOTTERBUSCHK@UWSTOUT.EDU
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Complaints about your treatment as a participant in this study should be made in writing to the following:

Chair
Institutional Review Board for the Protection of Human Subjects
Office of Research Promotions
University of Wisconsin-Stout
Menomonie, WI 54751

I have read and understand the above explanation of this study and my rights.

☐ I agree to participate. ☐ I do not wish to participate.

Name _____ Date _____

Witness _____ Date _____

This research has been approved by the University of Wisconsin-Stout Institutional Review Board for the Protection of Human Subjects.

Minnesota Mainstream Career Study Direct Service Staff Informed Consent Form

The Research and Training Center at the University of Wisconsin-Stout and the Minnesota Mainstream project at Rise, Inc. are investigating career development and vocational outcomes for persons with psychiatric disabilities who were involved in the Minnesota Mainstream project between its start in 1989 and March 1, 1996. As the direct service staff who provided services during some or all of this time period, we would like to obtain information about the services provided, types of consumers served, patterns of services, and changes in the program. We have developed an interview format to use during this interview. We will in no way link your responses with the consumers who you served over the years, nor will we share any of your responses with Rise, Inc. management.

Participation involves an interview that will take about one hour of your time. We do not anticipate that this study will present any social, mental health, or physical risk to you. However, we plan to audiotape the interview if you grant us permission. The interview will be scheduled at a mutually agreeable time.

The information obtained from the interview is part of a research study about career development in persons with mental health problems. The results will be used to understand employment and career patterns of persons with mental health problems. This information will also be used to improve vocational programs throughout the country. In addition, the results will be used by Rise, Inc. to improve the Minnesota Mainstream project.

None of the Rise, Inc. staff will see or have access to the interview. The only persons to see or have access to this information will be the Principal Investigator and his secretary at the University of Wisconsin-Stout who enters your responses into the data base. No reports, articles, presentations, etc. will reveal the name or identity of anyone who participated in this study.

If you want to withdraw from this study at any time, you may do so without any adverse consequences. All information collected from you will then be destroyed if you so desire.

If you have any questions, please contact:

Dr. Karl Botterbusch, Ph.D.
Research and Training Center
University of Wisconsin-Stout
Menomonie, WI 54751
Phone: (715) 232-1464
e-mail: BOTTERBUSCHK@UWSTOUT.EDU

Complaints about your treatment as a participant in this study should be made in writing to the following:

Chair
Institutional Review Board for the Protection of Human Subjects
Office of Research Promotions
University of Wisconsin-Stout
Menomonie, WI 54751

I have read and understand the above explanation of this study and my rights.

☐ I agree to participate. ☐ I do not wish to participate.

Name _____
Date _____

Witness _____ Date _____

This research has been approved by the University of Wisconsin-Stout Institutional Review Board for the Protection of Human Subjects.

Appendix C

Sample Identification Form for Minnesota Mainstream

Instructions for Minnesota Mainstream Sample Identification Form

Identification Number: Enter case number used by RISE or Minnesota Mainstream. Make certain that each consumer has a different identification number. Please make certain that we can eventually identify each consumer's name and file with this number. In order to avoid any chance of identification do *not* use Social Security Numbers.

Date of Birth: Enter the month, day, and year of consumer's birth. Enter the month using the following abbreviations: Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, and Dec.

Date of Program Entry: Enter the month, day, and year of program entry. If the consumer has entered or reentered the Minnesota Mainstream Program more than once, record the *first or earliest* program entry date. Use the abbreviations for months listed above.

Date of Program Exit: Enter the month, day, and year of program exit. This should be the last day that services were provided. If the consumer has exited the program several times, record the *last or latest* program exit date. Use the abbreviations for months listed above.

Gender: Check the appropriate line for gender.

Race/Ethnic Group: Check the most appropriate line for race or ethnic group. If not known, check "unknown."

Primary Psychiatric Disability: Enter the precise name of the consumer's major or primary psychiatric disability. Please try to be as accurate as possible, for example: use "paranoid schizophrenia" instead of just "schizophrenia." Do not use any DSM codes.

Onset: If there is medical evidence that the consumer "got" the psychiatric disability prior to college graduation, check the first line. If the consumer's psychiatric disability occurred after college graduation, check the second. Please note that "college graduation" refers only to the bachelor's degree (BA/BS).

Secondary Disabilities: If the consumer has no secondary (or co-existing) disabilities, enter "none." If the consumer has one or more secondary disabilities, enter the name of the disability. Please be as precise as possible. For example, instead of entering "physical disability" enter "low back pain."

Psychotropic Medications Taken by the Consumer: Record the name of any psychotropic medication taken by the consumer upon program entry. If the consumer did not take any psychotropic medications, enter "none."

Education: First, enter the number of years of education beyond high school. Here we will assume that a person takes 12 years to graduate from high school. If a person completed three years of college, enter "3". Second, enter the consumer's degree, major, and year of graduation. For example, a person might have a BA in Psychology in June, 1989, and an MS in Social Work in December, 1993. If the person has completed a specific course in vocational/technical school, record the course of study and the year completed. For example, if an X-ray technician may have

completed a two-year program, record "two-year program, X-ray technician, May, 1994."

Career Person Was in Prior to Onset of Psychiatric Disability: First, record the general career field in which the consumer was employed or going to school for at the onset of disability. Some examples could be: law, accounting, social work, or teaching. Next, record the job title(s) that the consumer may have had: junior partner in law firm, bank auditor, case worker, or junior high school science teacher. Finally, record the number of years that the consumer was employed in this career field.

Final Job Placement after Minnesota Mainstream Program: Enter the job title of the position in which the consumer was hired after placement. If the consumer has had more than one placement, enter the information about the current job or most recent job. First, record the job title as precisely as possible (see examples immediately above). Second, record the date of employment in months, days, and years. Next, record the hourly wage and the number of hours the consumer works in the typical week. If the consumer is paid a salary, divide the salary by the number of hours worked to determine hourly wage. For example, if a persons works 40 hours per week and is paid \$500 per week, the hourly wage is \$12.50.

Karl Botterbusch, Ph.D.
Research and Training Center
University of Wisconsin-Stout
Menomonie, WI 54751
(715) 232-1464

Sample Identification Form for Minnesota Mainstream

<i>Identification Number:</i> 	<i>Date of Birth:</i> Month: _____ Day: _____ Year: 19____
<i>Date of Program Entry:</i> Month: _____ Day: _____ Year: 19____	<i>Date of Program Exit:</i> Month: _____ Day: _____ Year: 19____
<i>Gender:</i> Male _____ Female _____ <i>Race/Ethnic Group:</i> White _____ Black _____ American Indian _____ Hispanic _____ Oriental _____ Other _____ Unknown _____	<i>Primary Psychiatric Disability:</i> <i>Onset:</i> Before college graduation ____ After college graduation ____ <i>Secondary Disability(ies):</i>
<i>Psychotropic Medications Taken by the Consumer Upon Program Entry</i> 1. _____ 2. _____ 3. _____ 4. _____	<i>Education:</i> 1. Number of years of education beyond high school: _____ 2. Degree, Major, Month and Year: a. _____ b. _____ c. _____
<i>Career Person Was in Prior to Onset of Psychiatric Disability:</i> Job title(s) Number of years: _____	<i>Final Job Placement after Minnesota Mainstream Program:</i> Job title _____ Dates of employment Month: _____ Day: _____ Year: 19____ Hourly wage \$ _____ Approximate number of hours employed weekly _____
<i>Date of data entry:</i> _____ <i>Person entering data</i> _____ <i>Date of coding data</i> _____ <i>Person coding data</i> _____	<i>Date of data entry into data base:</i> <i>Person entering data</i> _____

